<110> Steven M. Ruben, et al.

<120> 32 Human Secreted Proteins

<130> PZ006P1

<140> Unassigned
<141> 1998-11-10

<150> PCT/US98/10868
<151> May 28, 1998

<150> 60/044,039
<151> May 30, 1997

<150> 60/048,093
<151> May 30, 1997

<150> 60/048,190
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<150> 60/050,935
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<150> 60/048,101
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<150> 60/048,356
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<150> 60/056,250
<151> August 29, 1997

<150> 60/056,296
<151> August 29, 1997

<150> 60/056,293
<151> August 29, 1997

<160> 229

<170> PatentIn Ver. 2.0

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tctcccggac tcctgaggtc acatgcgtgg tggtggacgt aagccacgaa gaccctgagg     180
tcaagttcaa ctggtacgtg gacggcgtgg aggtgcataa tgccaagaca aagccgcggg     240
aggagcagta caacagcacg taccgtgtgg tcagcgtcct caccgtcctg caccaggact     300
ggctgaatgg caaggagtac aagtgcaagg tctccaacaa agccctccca acccccatcg     360
agaaaaccat ctccaaagcc aaagggcagc cccgagaacc acaggtgtac accctgcccc     420
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ccacgcctcc cgtgctggac tccgacggct ccttcttcct ctacagcaag ctcaccgtgg      600
acaagagcag gtggcagcag gggaacgtct tctcatgctc cgtgatgcat gaggctctgc      660
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<210> 2
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<212> PRT
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<222> (3)
<223> Xaa equals any of the twenty naturally ocurring L-amino acids

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<211> 86
<212> DNA
<213> Homo sapiens

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cccgaaatat ctgccatctc aattag                                          86
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<213> Homo sapiens

<400> 4
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<211> 271
<212> DNA
<213> Homo sapiens

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gcccctaact ccgcccagtt ccgcccattc tccgccccat ggctgactaa tttttttttat    180
ttatgcagag gccgaggccg cctcggcctc tgagctattc cagaagtagt gaggaggctt     240
ttttggaggc ctaggctttt gcaaaaagct t                                    271
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<210> 7
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<212> DNA
<213> Homo sapiens

<400> 7
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<210> 8
<211> 12
<212> DNA
<213> Homo sapiens

<400> 8
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<210> 9
<211> 73
<212> DNA
<213> Homo sapiens

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ccatctcaat tag                                                         73


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<211> 256
<212> DNA
<213> Homo sapiens

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caattagtca gcaaccatag tcccgccccт aactccgccc atcccgcccc taactccgcc      120
cagttccgcc cattctccgc cccatggctg actaattttt tttatttatg cagaggccga      180
ggccgcctcg gcctctgagc tattccagaa gtagtgagga ggcttttttg gaggcctagg      240
cttttgcaaa aagctt                                                      256


<210> 11
<211> 1169
<212> DNA
<213> Homo sapiens

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<223> n equals a,t,g, or c

<220>
<221> SITE
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<222> (1160)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1168)
<223> n equals a,t,g, or c

<400> 11

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rcaccgacgc agcgagcttt cagcaccggg agcgcgtcgc catgcactac cagatgagtg       180
tgaccctcaa gtatgaaatc aagaagctga tctacgtaca tctggtcata tggctgctgc       240
tggttgctaa gatgagcgtg ggacacctga ggctcttgtc acatgatcag gtggccatgc       300
cctatcagtg ggaatacccg tatttgctga gcattttgcc ctctctcttg ggccttctct       360
ccttttccccg caacaacatt agctacctgg tgctctccat gatcagcatg ggactctttt       420
ccatcgctcc actcatttat ggcagcatgg agatgttccc tgctgcacag ccttctaccg       480
ccatggcaag gcctaccgtt tcctctttgg tttttctgcc gtttccatca tgtacctggt       540
gttggtgttg gcagtgcaag tgcatgcctg gcagttgtac tacagcaaga agctcctaga       600
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tggacatccc atcgaatgaa aggacactag tacagcggtt ccaaaatccc ttctggtgat       720
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tttgccatct gctgaggtgg caaaactata atttattcct ggttggctag aactgggtga       840
ccaacagcta tgaaacaaat ttcagctgtt tgaagttgaa ctttgaggtt tttctttaag       900
aatgagcttc gtccttgcct ctactcggtc attctcccca tttccatcca ttaccccctta      960
gccattgaga ctaaaggaaa tagggaataa atcaaattac ttcatctcta ggtcacgggt      1020
caggaaacat ttgggcagct gctcccttgg cagctgtggt ctcctctgca aagcatttta      1080
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<210> 12
<211> 1310
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<213> Homo sapiens

<400> 12

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agtgaagaag atcaggctgc tgagcttcgt gcttatctga aatctaaagg agctgagatt       180
tcagaagaga actcggaagg tggacttcat gttgatttag ctcaaattat tgaagcctgt       240
gatgtgtgtc tgaaggagga tgataaagat gttgaaagtg tgatgaacag tgtggtatcc       300
ctactcttga tcctggaacc agacaagcaa gaagctttga ttgaaagcct atgtgaaaag       360
ctggtcaaat ttcgcgaagg tgaacgcccg tctctgagac tgcagttgtt aagcaacctt       420
ttccacggga tggataagaa tactcctgta agatacacag tgtattgcag ccttattaaa       480
gtggcagcat cttgtggggc catccagtac atcccaactg agctggatca agttagaaaa       540
tggatttctg actggaatct caccactgaa aaaaagcaca cccttttaag actactttat       600
gaggcacttg tggattgtaa gaagagtgat gctgcttcaa aagtcatggt ggaattgctc       660
ggaagttaca cagaggacaa tgcttcccag gctcgagttg atgcccacag gtgtattgta       720
cgagcattga aagatccaaa tgcatttctt tttgaccacc ttcttacttt aaaaccagtc       780
aagtttttgg aaggcgagct tattcatgat ctttttaacca ttttttgtgag tgctaaattg       840
gcatcatatg tcaagtttta tcagaataat aaagacttca ttgattcact ggcctgtta       900
catgaacaga atatggcaaa aatgagacta cttactttta tgggaatggc agtagaaaat       960
aaggaaattt cttttgacac aatgcagcaa gaacttcaga ttggagctga tgatgttgaa      1020
gcatttgtta ttgacgccgt aagaactaaa atggtctact gcaaaattga tcagacccag      1080
agaaaagtag ttgtcagtca tagcacacat cggacatttg gaaaacagca gtggcaacaa      1140
ctgtatgaca cacttaatgc ctggaaacaa aatctgaaca aagtgaaaaa cagccttttg      1200
agtctttctg atacctgagt ttttatgctt ataatttttg ttctttgaaa aaaaagccct      1260
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aaatcatagt aaaacattat aaactaaaaa aaaaaaaaaa aaaaaaaaaa   1310

<210> 13
<211> 1139
<212> DNA
<213> Homo sapiens

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<221> SITE
<222> (7)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (133)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (968)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1139)
<223> n equals a,t,g, or c

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cattgcctgg gangaagtct gtcaacaaag tgacatgtct agtctgccgg aagggtgaca     180
atgatgagtt tcttctgctt tgtgatgggt gtraccgtgg ctgccacatt tactgccatc     240
gtcccaagat ggaggctgtc ccagaaggag attggttctg tactgtctgt ttggctcagc     300
aggtggaggg agaattcact cagaagcctg gtttcccaaa gcgtggccag aagcggaaaa     360
gtggttattc gctgaacttc tcagagggtg atggccgccg acgccgggta ctgttgaggg     420
gccgagaaag cccagcagca gggcctcggt actcggaaga agggctctcc ccctccaagc     480
ggcggcgact ctctatgcgg aaccaccaca gtgatctcac attttgcgag attatcctga     540
tggagatgga gtcccatgat gcagcctggc ctttcctaga gcctgtgaac ccacgtttgg     600
tgagtgggta ccggcgcatc atcaaaaatc ctatggattt ttccaccatg cgggagcggc     660
tgctcagggg agggtacacc agctcagagg agtttgcggc tgatgccctc ctggtatttg     720
acaactgcca gactttcaac gaggatgact ctgaagtagg caaggctggg cacatcatgc     780
gccgcttctt cgagagccgc tgggaggagt tttatcaggg aaaacaggcc aatctgtgag     840
gcaagggagg tggggagtca ccttgtggca tctcccccca ccttccaaac aaaaacctgc     900
cattttcacc tgctgatgct gccctgggtc cagactcaag tcagatacaa ccctgatttt     960
tgaccttncc cttggcagtg ccccacatcc tcttattcct acatcccttt ctcccttccc    1020
tcctcttgct cctcaagtaa gaggtgcaga gatgaggtcc ttctggacta aaagccaaaa    1080
aaagaaagaa aaaawaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaan     1139
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<210> 14
<211> 2271
<212> DNA
<213> Homo sapiens

<400> 14
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gcagcagggc atcaaggccg gggacgcact ctggctgcgc ttcaagtact acagcttctt    240
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caaccccctac ggcctcgttg ccccccgttt ccagcgaaag ttcaaggcca agcagctcac   1020
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tgtcaactgg gacatccggc aggtggccat cgagtttgat gaacacatca atgtggcctt   1320
cagctgcgtg tctgccagct gccgaattgt acacgagtat atcggggggct acattttcct   1380
gtcgacgcgg gagcgggccc gtggggagga ctggatgaa gacctcttcc tgcagctcac    1440
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cacagccact cccaagccca cacccacagg ggctcactgc cccacacccg ctccaggcag   1560
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caaggaaagg ggctttcctg ataaagacaa gagttggtta gagaaaggga cacctaagtc   1980
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cggaagaagg gtattccatc tgctgacaga gccagagatg tgactcatgc cctccccgaa   2220
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<210> 15
<211> 626
<212> DNA
<213> Homo sapiens

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<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (591)
<223> n equals a,t,g, or c

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gcacgmgcgc aagttcaaca tgaagatgat atgaggccgg ggcggggggc agggaccccc    120
gggcggccgg gcaggggaag gggcctggcc gccacctgct cactctccag tccttcccac    180
ctcctcccta cccttctaca cacgttctct ttctccctcc cgcctccgtc cctgctgcc     240
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cccccgccagc cctcaccacc tgccctcctt ctaccaggac ctcagaagcc cagacctggg    300
gaccccacct acacaggggc attgacagac tggagttgaa agccgacgaa ccgatacgcg    360
gcagagtcaa taattcaata aaaaagttac gaactttctc tgtaacttgg gtttcaataa    420
ttatggattt ttatgaaaac ttgaaataat aaaaagagaa aaaaactatt tcctatagct    480
agtcggaatg caaacttttg acgtcctgat tgctccaggg ccctcttttcc aactcagttt    540
cttgtttttc ctcttcctcc tcctcctctt cttcctcctt tctttctctt ncccatggg    600
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<210> 16
<211> 2118
<212> DNA
<213> Homo sapiens

<400> 16
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cacatggaca gaggcttgga ccgaggcctg gtcacagcag cgagcatcca gggtttgcag    180
ggacgatgtt acagactctg ttttctgcct ggcgtttcac ttgtgtctgc tcctagcctg    240
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gcaggaggtg aatgttcact ttctgttctc cagtgtcact gttctgtttc cacgggatgg    360
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ttccatacaa ataactcagc acacaagtga cccaggacat atgcctgcca aagggatgtg    540
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ctttcttgcc acagattgag gccactttg agcaagggag atcctggagt taagacaggt    660
gttggggca gcctgtattt taccctaggg gcaggtctgc atggtgaccc cacatygcac    720
tggtaaacca tttgagtccc actcttcatc ctggaagtgg gaactggagt cccacccaca    780
gtgcattcag aaagcatgct gtgtgggggc tgcttctcag gaggccaggc ccttctgagc    840
ggaaccgtcc tggagagagc ctgccctcgt ttccaggctg cagccgtaac gcactttctc    900
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caggacccag gccgcagagg gagcaggaag agatgctgat agtttgatct agaaaccagc   1140
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acgtttctat atatcttgaa gctaaatgta tatatgagta gtttgccatg agataacaca   1980
gtgtaaacag tagacaccca gaaatcgtga cttctgtgtt ctctccattt gagtattttg   2040
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aaaaaaactg gagactag                                                 2118
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<210> 17
<211> 1076
<212> DNA
<213> Homo sapiens

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<222> (979)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1007)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1040)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1050)
<223> n equals a,t,g, or c

<400> 17

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ggaagatccc ggctggaacg cccagatcac cctaggcctg gtcaagttca agaaccagca     180
ggccatccag acagtgcggg cccggcagag cctcgggacc gggaccctcg tgtcctaaac     240
caccgggcgc accatctttc cttcatgcta cccaccacct cagtgctgag gtcaaggcag     300
cttcgttgtt ccctctggct tgtgggggca cggctgtsyt ccatgtggca aggtggaagg     360
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gaaggctacg cagggctgag gatgaagatg cagcccctgg atggtcccag actctcagga     480
catgcccagc tcaggggctt cgagccacag gcctggcctc atatggcatg aggggggagct     540
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ccctggcttt gtgccaggcc tggaggaggg cagtcccca tggggtgccg agccaacgcc      660
tcaggaatca ggaggccagc ctggtaccaa aaggagtacc cagggcctgg tacccaggcc     720
cactccagaa tggcctctgg actcaccttg agaaggggga gctgctgggc ctaaagccca     780
ctcctggggg tctcctgctg cttaggtcct tttgggaccc ccacccatcc aggcccttttc    840
tttgcacact tcttccccca cctctaygca tcttcccccc actgcggtgt tcggcctgaa     900
ggtggtgggg gtgaggggg gtttggccat tagcatttca tgtctttccc caaatgaaga     960
tgccctgcaa agggcagtna accacaaaaa aaaaaaaaaa aaaaacntgg ggggggggcc    1020
ccgttaacca ttttggcctn atagggggggn ggttttttaaa aattaattgg gcccgg      1076
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<210> 18
<211> 1379
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (639)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (697)
<223> n equals a,t,g, or c

<220>
<221> SITE

<222> (1347)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1361)
<223> n equals a,t,g, or c

<400> 18

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ggcacgagca ccctcccaca cctccctgaa cttccatctg atcgacttca acttgctgat          60
ggtgaccacc atcgttctgg ccgccgctt  cattgggtcc atcgtgaagg aggcctctca         120
gagggggaag gtctccctct ttcgctccat cctgctgttc ctcactcgct tcaccgttct         180
cacggcaaca ggctggagtc tgtgccgatc cctcatccac ctcttcagga cctactcctt         240
cctgaacctc ctgttcctct gctatccgtt tgggatgtac attccgttcc tgcarctgaa         300
ttkcgamcty cgsaagacaa gcctcttcaa ccacatggcc tccatggggc cccgggaggc         360
ggtcagtggc ctggcaaaga gccgggacta cctcctgaca ctgcgggaga cgtggaagca         420
gcacasaaga cagctgtatg ccccggacgc catgcccacc catgcctgct gcctgtcgcc         480
cagcctcatc cgcagtgagg tggagttcct caagatggac ttcaactggc gcatgaagga         540
agtgctcgts agctccatgc tgagcgccta ctatgtggcc tttgtgcctg tytggttcgt         600
gaagaacaca cattactatg acaagcgctg gtcctgtgna actcttcctg ctggtgtcca         660
tcagcacctc cgtgatcctc atgcagcacc tgctgcntgc cagctactgt gacctgctgc         720
acaaggccgc cgcccatctg ggctgttggc agaaggtgga cccagcgctg tgctccaacg         780
tgctgcagca cccgtggact gaagaatgca tgtggccgca gggcgtgctg gtgaagcaca         840
gcaagaacgt ctacaaagcc gtaggccamw acaamgtggc tatcccctct gacgtctccc         900
acttccgctt ccakttcttt ttcagcaaac ccctgcggat cctcaacatc ctcctgctgc         960
tggagggcgc tgtcattgtc tatcagctgt actccctaat gtcctctgaa aagtggcacc        1020
agaccatctc gctggccctc atcctcttca gcaactacta tgccttcttc aagctgctcc        1080
gggaccgctt ggtattgggc aaggcctact catactctgc tagcccccag agagacctgg        1140
accaccgttt ctcctgagcc ctggggtcac ctcagggaca gcgtccaggc ttcagcaagg        1200
gctccctggc aaggggctgt tgggtagaag tggtggtggg ggggacaaaa gacaaaaaaa        1260
tccaccagag ctttgtattt ttgttacgta ctgtttcttt gataattgat gtgataagga        1320
aaaaagtcct atttttatac tcccaanmaa aaaaaaaaaa naaaaagcgg ccgaaagct         1379
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<210> 19
<211> 1337
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (20)
<223> n equals a,t,g, or c

<400> 19

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ctggtgttgg gcctgagccn cctcaacaac tcctacaact tcagtttcca cgtggtgatc          60
ggctctcagg cggaagaagg ccagtacagc ctgaacttcc acaactgcaa caattcagtg         120
ccaggaaagg agcatccatt cgacatcacg gtgatgatcc gggagaagaa ccccgatggc         180
ttcctgtcgg cagcggagat gcccctttc  aagctctaca tggtcatgtc cgcctgcttc         240
ctggccgctg gcatcttctg ggtgtccatc ctctgcagga acacgtacag cgtcttcaag         300
atccactggc tcatggcggc cttggccttc accaagagca tctctctcct cttccacagc         360
atcaactact acttcatcaa cagccagggg ccaccccatc gaaggccttg ccgkcatgta         420
ctacatcgca cacctgctga agggcgccct cctcttcatc accatcgccc tgattggctc         480
aggctgggct tcatcaagta cgtcctgtcg gataaggaga agaaggtctt tgggatcgtg         540
atccccatgc aggtcctggc caacgtggcc tacatcatca tcgagtcccg cgaggaaggc         600
gccacgaact acgtgctgtg gaaggagatt ttgttcctgg tggacctcat ctgctgtggt         660
gccatcctgt tccccgtagt ctggtccatc cggcatctcc aggatgcgtc tggcacagac         720
gggaaggtgg cagtgaacct ggccaagctg aagctgttcc ggcattacta tgtcatggtc         780
```

```
atctgctacg tctacttcac ccgcatcatc gccatcctgc tgcaggtggc tgtgcccttt      840
cagtggcagt ggctgtacma gctcttggtg garggctcca ccctggcctt cttcgtgctc      900
acgggctaca agttccagcc cacagggaac aacccgtacc tgcagctgcc ccaggaggac      960
gaggaggatg ttcagatgga gcaagtaatg acggactctg ggttccggga aggcctctcc     1020
aaagtcaaca aaacagccag cgggcgggaa ctgttatgat cacctccaca tctcagacca     1080
aagggtcgtc ctcccccagc atttctcact cctgcccttc ttccacagcg tatgtgggga     1140
ggtggagggg tccatgtgga ccaggcgccc agctcccggg acsccggttc ccggacaagc     1200
ccatttggaa gaagagtccc ttcctccccc caaatattgg gcagccctgt ccttaccccg     1260
ggaccacccc tcccttccag ctatgtgtac aataatgacc aatctgtttg gctaaaaaaa     1320
aaaaaaaaaa aactcga                                                    1337


<210> 20
<211> 1390
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1267)
<223> n equals a,t,g, or c

<400> 20
gccgttttgg ttcccggttg gtgcttcctg ttcgcagctg cggcacttca aggttactga       60
cttttttatga tgtttggtgg ctatgagact atagawgcrt rsgrrgatga tytttatcga      120
gatgagtcat ctagtgaact gagtgttgat agtgaggtgg aatttcaact ctatagccaa      180
attcattatg cccaagatct tgatgatgtc atcagggagg aagagcatga agaaaagaac      240
tctgggaatt cggaatcttc gagtagtaaa ccaaatcaga agaagctaat cgtcctttca      300
gatagtgagg tcatccagct gtcagatggg tcagaggtca tcactttgtc tgatgaagac      360
agtatttata gatgtaaagg aaagaatgtt agagttcaag cacaagaaaa tgcccatggt      420
ctttcttctt ctcttcaatc taatgagctg gttgataaga aatgcaagag tgatattgag      480
aagcctaaat ctgaagagag atcaggtgta atccgagagg tcatgattat agaggtcagt      540
tcaagtgaag aggaagagag caccatttca gaaggtgata atgtggaaag ctggatgcta      600
ctgggatgtg aagtagatga taaagatgat gatatccttc tcaaccttgt gggatgtgaa      660
aactctgtta ctgaaggaga agatggtata aactggtcca tcagtgacaa agacattgag      720
gcccagatag ctaataaccg aacacctgga agatggaccc agcggtacta ttcagccaac      780
aaaaacatta tctgtagaaa ttgtgacaaa cgtggtcatt tatcaaaaaa ctgcccctta      840
ccacgaaaag ttcgtcgctg cttcctgtgc tccaggagag gacatctcct gtattcctgt      900
ccagccccccc tttgcgaata ctgtcctgtg cctaagatgt tggaccactc atgtcttttc      960
agacattcct gggataaaca gtgtgaccga tgtcatatgc taggccacta tacagatgct     1020
tgcacagaaa tctggaggca gtatcaccta acgaccaaac ctggaccacc caaaaagccg     1080
aagaccccctt caagaccatc agccttagca tattgctatc actgcgcgca aaaaggccat     1140
tatggacacg aatgtccaga aagagaagtg tatgacccgt ctccagtatc tccattcatc     1200
tgctactatg rtgacaaata tgaaattcag gagagagaaa agagactaaa acaaaaaata     1260
aaagtantca agaaaaatgg ggttatccca gagccatcca agctacctta tataaaagca     1320
gcaaatgaga accccaccca tgatataagg aagggccgtg cctcatggaa aagcaacagg     1380
tggcctcaag                                                           1390


<210> 21
<211> 1431
<212> DNA
<213> Homo sapiens

<400> 21
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ctcagtctcc ctggcgagcg acgggcagaa atctcgaacc agtggagcgc actcgtaacc      120
tggatcccag aaggtcgcga aggcagtacc gtttcctcag cggcggactg ctgcagtaag      180
```

```
aatgtctttt ccacctcatt tgaatcgccc tcccatggga atcccagcac tcccaccagg        240
gatcccaccc ccgcagtttc caggatttcc tccacctgta cctccaggga ccccaatgat        300
tcctgtacca atgagcatta tggctcctgc tccaactgtc ttagtaccca ctgtgtctat        360
ggttggaaag catttgggcg caagaaagga tcatccaggc ttaaaggcta aagaaaatga        420
tgaaaattgt ggtcctacta ccactgtttt tgttggcaac atttccgaga aagcttcaga        480
catgcttata agacaactct tagctaaatg tggtttggtt ttgagctgga agagagtaca        540
aggtgcttcc ggaaagcttc aagccttcgg attctgtgag tacaaggagc cagaatctac        600
cctccgtgca ctcagattat tacatgacct gcaaattgga gagaaaaagc tactcgttaa        660
agttgatgca aagacaaagg cacagctgga tgaatggaaa gcaaagaaga aagcttctaa        720
tgggaatgca aggccagaaa ctgtcactaa tgacgatgaa gaagccttgg atgaagaaac        780
aaagaggaga gatcagatga ttaaaggggc tattgaagtt ttaattcgtg aatactccag        840
tgagctaaat gccccctcac aggaatctga ttctcacccc aggaagaaga agaaggaaaa        900
gaaggaggac attttccgca gatttccagt ggccccactg atcccttatc cactcatcac        960
taaggaggat ataaatgcta tagaaatgga agaagacaaa agagacctga tatctcgaga       1020
gatcagcaaa ttcagagaca cacataagaa actggaagaa gagaaaggca aaaaggaaaa       1080
agaaagacag gaaattgaga agaacggag agaaagagag agggagcgtg aaagggaacg       1140
agaaaggcga gaacgggaac gagaaaggga agagaacgt gaacgagaaa aggagaaaga       1200
acgggagcgg gaacgagaac gggatateeg aag ccgtgaccgg acaaaagaga gagaccgaga       1260
tcgggatcga gagagagatc gtgaccggga tagagaaagg agctcagatc gtaataagga       1320
tcgcattcga tcaagagaaa aaagcagaga tcgtgaaagg gaacgagagc gggaaagaga       1380
gagagagaga gaacgagagc gagaacgaga acgggagcga gagagagaag c                1431
```

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<400> 22
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agccgccctc cctatcttgc tgctcctctt ggcactcagg ggcaccttcc atggagccag        180
accgggtgga ggggcttctg ggatttggtg tctgctgctg ccagagcagg aaccccagt         240
ctaggacttg ggcattttaa cagggagaaa gtagtggctt ccctttttctc tctctcctcc        300
ttttttccctt taagcccaca gattcaggtc atgccaaaag ctctctggtt gtaacctgga        360
gacatgtgga ggggaatggc gatgggatta taggactctc cccatctcgg gccctgaccc        420
tgacccttgc caccaaccca aagacagctg gtgggtttcc ccttggagam aatcctgcgt        480
ttgcctgggc cggccctggc tgccctcagc tttcgctgat ctgcccggcc tggagcctcc        540
catcaccccg cttcttgttg ggcctcaggc actggttacc agaaggggggt ctgggtctgc        600
tcaggaatca tgttttgtag cacctcctgt tggaggggtg gagggatgtt cccctgagcc        660
aggctgagac tagaacccca tcttccctga gccaggctga gactagaacc ccatcttccc        720
caccacgcca cccctgtgst kgctacagga gcacagtagt gaaggcctga gctccaggtt        780
tgaaagaccc aactggagcg tggggcgggc aggcaggggt tagtgaaagg acacttccag        840
ggttaggaca gagcatttag ccttctggaa gaaccctgc ctggggtggg actgtgcagg        900
ccagagaagg tggcatgggc ctgaacccac ctggactgac ttctgcactg aagccacaga        960
tggagggtag gctggtgggt gggggtggtt cgttctctag ccggggcaga cacccagctg       1020
gctgggtcct tcctcagcct tgcctcctcc tgtccccaac cctttccttt cctcctgctt       1080
gcggactgct ggtcccctct ccttccctcc ttccagctgt ttctagttac cacctacccc       1140
tgggccgtgg actgatcaga ccagcattca aaataaaagt ttgttccaag ttgacagtgt       1200
ggtgctccct gcccagcccc tccaggtgga ggtgctgcca cgggaacgca gttgctctgc       1260
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cagtcaggca ggcatggctt ccgtgttcag gctccctcac cagctggtga cacgggacaa       1380
gcttacaaac cttctctgaa cctcagtttt ctcatttaca agaggcaaag catccatcac       1440
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```
cttgtgtgga ttcaragaat gtraggccct ggggtgtcct acacaaggga aaggcttgct    1500
cagtgagcgg tctgcacacc gttagccacc ctgccacctc tgtgccctgg gcaggctcca    1560
aaggaaagct ctggctggga ctgccrggag tctcacacgc tcctgttgac attcccagca    1620
gcygcccctg aggtcgatgt ttgttctgtt tttctttttc tttttgaga cggagtctcg     1680
ctgtgttgcc aggctggagt gcagtggtgt gatctctgct cactgcaacc tccgcctgcc    1740
agtttcaagt gattctctgc ctcagccttc tgagtagctg ggactacagg tgcacgccac    1800
cacgcccagc taactttttg tatttwagta gagacagggt ttcgccatgt cggccagggt    1860
ggtcttgatc tcctgacctc atgatccacc cgcctcagcc tcccaaagtg ctgggattac    1920
aggtatgagc caccgcaccg ggcctgttct attttttctag ttaagggaac tgaagctcag   1980
araggtgtca ccagcargtg ttcattccca tgccagcctt gcccccccggc ttttcccagg   2040
caggctcctg cgtgcccact ggctccagcc tggtcctctg tctcttggct gcttcactcc    2100
tgctctttgt cccgactctg gccctgctta caggggccac tacctgctgg tgcctccata    2160
acaagcgtct ggcgttgaga cccctggcat ggcaggggct ttggggtctg gtttccacaa    2220
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gtacttgcca gaaccattct tgggattcag gagctcgggc gactgccttg gcctctggcc    2340
gcacccagga gggtgggggtt ggatctgtgt agttgccagg cccacacctg ccagcagggg   2400
gctgactgga tccatgcttt actgtgttta atgggggtaa caggggtccc tacagccctc    2460
ccagytaaam atttggaaca aaacaccagc cctttgtag tggatgcaga ataaaattgt      2520
taatccaatc aaaaaaaaa                                                  2539
```

<210> 23
<211> 1041
<212> DNA
<213> Homo sapiens

<400> 23

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gctcggggct cgctgcgccg gttgctgcgg ctcctcgtgc tggggctctg gctggcgttg    120
ctgcgctccg tggccgggga gcaagcgcca ggcaccgccc cctgctcccg cggcagctcc    180
tggagcgcgg acctggacaa gtgcatggac tgcgcgtctt gcagggcgcg accgcacagc    240
gacttctgcc tgggctgcgc tgcagcacct cctgcccccт tccggctgct ttggcccatc    300
cttggggggcg ctctgagcct gaccttcgtg ctggggctgc tttctggctt tttggtctgg    360
agacgatgcc gcagagagag aagttcacca cccccataga ggagaccggc ggagagggct    420
gcccagctgt ggcgctgatc cagtgacaat gtgcccctg ccagccgggg ctcgcccact     480
catcattcat tcatccattc tagagccagt ctctgcctcc cagacgcggc gggagcaagc   540
tcctccaacc acaggggggg tggggggcgg tgaatcacct cygaggcctg ggcccagggt    600
tcaggggaac ttccaaggtg tctggttgcc ctgcctctgg ctccagaaca gaaagggagc    660
ctcacgctgg ctcacacaaa acagctgaca ctgactaagg aactgcagca tttgcacagg   720
ggaggggggt gccctccttc ctagaggccc tgggggccag gctgacttgg ggggcagact     780
tgacactagg ccccactcac tcagatgtcc tgaaattcca ccacgggggt caccctgggg    840
ggttagggac ctatttttaa cactagggggg ctggcccact aggagggctg gccctaagat    900
acagacccc ccaactcccc aaagcgggga ggagatattt attttgggga gagtttggag     960
gggaggggaga atttattaat aaaagaatct ttaactttaa aaaaaaaaaa aaaaaagggc  1020
ggccgctcta gaggatccct c                                             1041
```

<210> 24
<211> 1962
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (452)
<223> n equals a,t,g, or c

<220>

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<221> SITE
<222> (480)
<223> n equals a,t,g, or c


<400> 24
acccacgcgt ccggtacaaa acacagtttt attctatgaa aattttgaga ttattagaaa      60
cattagattt agggttgcat attaaaaact atatccattt tgccttatta tttagtgtct     120
cactcaggat ataacacact ataatagaaa atgtagactt cagaatcagg tatatttgag     180
atggtttgta tactggttct gacacttgtt agctattcat ctttggtaaa ttccccatta     240
ccctttgtkc acctatwtgt ggggatcagt gcatagtgtg tgtwaagcat ttaatacctg     300
gcaagtgttc agcaaatttt ttgttctata tatttattat ttgattattg gccctgagga     360
gtaggtgttt gtttgtttgt ttgtttgttt agttttattt ctcatctcct caggaacaca     420
aatgaaactt ggatattgtt atggtgcttt tnataatata tttattattt tcagcaattn     480
attcttgtta aaacaatttc ttatgacaag ttactcatct tcaatggtga gaagaaatct     540
agctcagaat aatatatttt tagtgtttgt atctctggat actcattttg ctcattgcca     600
cgtaaagtaa aaaaatacat aaattagctt attccaatgt aatatcttca ggatagtcat     660
gggcaaggaa ttaatcacat taagagataa ctgcaactaa gcactatttg aggtgacttc     720
tgtggaaaaa aaattaatyc tttaccattg cagcgttctg ccctaggtcc aaatgttacc     780
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atcagtggtc gtgaagtgtt tgaatttcgt cctgaactgg tcaatgatga tgatgaggaa     960
gcagatgata cccgctacac ccaggaaaca ggtggtgatg aggttgatga ttcagtgagt    1020
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agtaagttca gagtagttca tgataaattg aaaatataat ggtcattgca gaaaatgatt    1560
gatgttgtaa ctgtccaccc aagtaagaag tgtatctgcc tttccatctt ttggttttca    1620
tttgggcatg tgctattacc agaaacaaca aacttatatt taaaataccc ttcatttgac    1680
acagtttta atgagtgatt taattttcctc tgtatttgta tgtttagaag actgcctaaa    1740
acatgagcac tgtacttcat aaaggaaacg cgtatgcaga ttcagtattg tgtatctttg    1800
gacaattaga tggacattta aaatggaact tcttttatct gacaggatca gctacaatgc    1860
cctgtgttaa attgtttaaa agtttccctt ttcttttttg ccaataaagt tgtaaataaa    1920
gaccatcata cattaaaatc caaaaaaaaa aaaaaaaaa aa                        1962


<210> 25
<211> 1228
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
<222> (580)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (621)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (1159)
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<223> n equals a,t,g, or c

<400> 25

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gagccccagc agccactccc cagaggggag gcctccacct ctgctgcctg ggggtccagt       120
gtgtaaggca gctgcatctg caccgagctc cctcctggac cagccgtgcc tctgccccgc       180
accctctgtc cgcaccgctg ttgccctgac aacgccggat atcacattgg ttctgccccc       240
tgacatcatc caacaggaag cgtcaccctg agggaggaga cagaagcctg ggccaggtga       300
acagtggtat agcagccact ccagcctctg ctgcagcagc caccctggat gtggctgttc       360
ggagaggcct gtcccacgga gcccagaggc tgctgtgcgt ggccctggga cagctggacc       420
ggcctccaga cctcgcccat gacgggagga gtctgtggct gaacatcagg ggcaaggagg       480
cggctgccct atccatgttc catgtctcca cgccactgcc agtgatgacc ggtggtttcc       540
tgagctgcat cttgggcttg gtgctgcccc tggcctatgn ttccagcctg acctggtgct       600
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cagtggaaga tgttgcagtg ccatcctcac ctggtggctt gaaatcggcc aaggtgggag       900
catttacacc gcagaaatga caccgcacgc cagcgccccg cggccgcgat ccggacccca       960
agcccacggc tccctcgact ctggggcacg gaaccccgcc cactcccaat ccccgcgccc      1020
cgccctctcc cacccgtgct tcccccgctc cacccctcac ctcacctcgc cccsgcccca      1080
cccatcgcgc cccggcccgt cccatcgagg cccatgcaac ccacgctcgg tyccgttccg      1140
gccctgcgc tckcgctkns ttcgctcccc gcccttgcgc cgttagtaaa catcgctcaa      1200
acgaaaaaaa aaaaaaaaaa aaactcga                                        1228
```

<210> 26
<211> 1340
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (847)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1303)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1307)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1314)
<223> n equals a,t,g, or c

<400> 26

```
aattcggcag agagatggcc gccccgtgg atctagagct gaagaaggcc ttcacagagc         60
ttcaagccaa agttattgac actcaacaga aggtgaagct cgcagacata cagattgaac       120
agctaaacag aacgaaaaag catgcacatc ttacagatac agagatcatg actttggtag       180
atgagactaa catgtatgaa ggtgtaggaa gaatgtttat tcttcagtcc aaggaagcaa       240
ttcacagtca gctgttagag aagcagaaaa tagcagaaga aaaaattaaa gaactagaac       300
agaaaaagtc ctacctggag cgacgttaaa ggaagctgag gacaacatcc gggagatgct       360
```

```
gatggcacga agggcccagt agggagcctc tctgggaagc tcttcctcct gcccctccca    420
ttcctggtgg gggcagagga gtgtctgcag ggaaacagct tctcctctgc cccgatggat    480
gctttatttg gatggcctgg caacatcaca ttttctgcat caccctgagc cccatttgct    540
tcccagccct ggagttttta cccggctttg ctgccacctc tgcccaggac ackcttccct    600
ctcgggatgt gtgatgaact cccaggagag ggaagatggg agccagggca agataggaag    660
ctctgcctga gctttccact aggcacgcca gccagaccaa taaaaagcgt ctgtcccact    720
ctgctaagcc tggttttctt gagcagaggg atggaacaga gggtgagaga ggcagtggcc    780
gtctccacct cagctcctgc tccctctgca tcagagccct tcctttcttg ggggatgggc    840
cttgccntct tctcttttcc cttcctgtac ctttgactaa cgctcagctt ccgggcctgc    900
atgcagtaga cagaagagga agaaagaaca gatgttcaca gctgaatctc agtgaacaga    960
atagcagtcc ctggatggca gtctgcctaa agattccttt ccctgccttc tcccatacat   1020
tccaaaagga agttcaacag taagcagcac ctccaagact gtctccttty ggccartatc   1080
ataagatgga cgccataatc ctgaggcctc ctagaggctg aggggggcaac ggtgtgatcc   1140
agctggctca tcccagccag gtgggccaat tattcaattt tcaagaattt tgttgcaagc   1200
cagttgtcaa acacagccat tataattatg taaatttgca aattatgtta aaaacaagga   1260
caataaatat tcaaaatgca tccctaawwa aaaaaaaaaa aangggnggc cgcnctaggg   1320
gatccaagct tacgtacgcg                                              1340
```

<210> 27
<211> 806
<212> DNA
<213> Homo sapiens

<400> 27
```
accttcttcc atgtttagtc ccttgggctc tgctaccctc ctgctggagg tgagagcatc     60
ctgtgtgcaa ccagagatgc cctctggctt tcagacctgc ctgcttttca ccctcagccc    120
tttctcactc agcaaaattg tgggggtccc tagtcagcag ctccctgggc agctctctga    180
gcaaggtggt ctctgtggtc atgaaggaga gccggctagg acagtgccgg aaactcagct    240
gcctctcccc ttcaactcag ctggcccccc gcacctgaag tgcacaggag ccgggaagag    300
agtctggagc ccaccccgga gggcagcaca ggaggtgtct ctgcagctgg tgtcctgcca    360
cccctgcagg cagcacacgt cccgggcatt ctccttagcc acagacagaa cagccagtgc    420
cagagtctgc tgtcgttccc cttttaagcac actcattcac cacacccgag gaggccagag    480
gtgcagggag catgggctgt cgcttcccct ttaagcacac tcattcacca cacccgagga    540
ggccagaagt gcagggagca tgggctgggt gcacctccgc aggagagaag gctgagccac    600
cgccgtcccg ggagcccggc tcccaggcct ctcgttttcc cctacctccc taagactttt    660
ctgtcactct ctggccattg aaaggcttct gttccttaaa gtgctgttac actctccttt    720
cccaggatgc agcaagccaa aacagtacca ctgcacgtca gcctgggtga cagagtgaga    780
ccctatctta aaaaaaaaaa aaaaaa                                        806
```

<210> 28
<211> 696
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (9)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (21)
<223> n equals a,t,g, or c

<400> 28
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gagttcccna cgcggtggcg nccgttttag aaattagtgg atcccccgg gctggcaggg      60
```

```
aattcggcac gagcacagag gaaagcgggt gcccggcatg gccatcctga tgttgctggc    120
gggatcccca tgcaccttgt ccttctccac tgatactggc agctcggctc ctggacccaa    180
gatcccttga gtggaattct gcagtgcaag agcccttcgt gggagctgtc ccatgtttcc    240
atggtcccca gtctcccctc cacttggtgg ggtcaccaac tactcaccag aagggggctt    300
accaagdaag ccctaaaaag ctgttgactt atctgcgctt gttccaactc ttatgccccc    360
aacctgccct accaccacca cgcgctcagc ctgatgtgtt tacatggtac tgtatgtatg    420
ggagagcaga ctgcaccctc cagcaacaac agatgaaagc cagtgagcct actaaccgtg    480
ccatcttgca aactacactt taaaaaaaac tcattgcttt gtattgtagt aaccaatatg    540
tgcagtatac gttgaatgta tatgaacata ctttcctatt tctgttcttt gaaaatgtca    600
gaaatatttt tttctttctc attttatgtt gaactaaaaa ggattaaaaa aaaaatctcc    660
agamaaaaaa aaaaaaaaaa aaattactgc ggtccg    696
```

<210> 29
<211> 1007
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (922)
<223> n equals a,t,g, or c

<400> 29
```
aattcggcac gaggaaaaaa taccatttgt gtatgatacc caatttggat ctcaatttgg    60
atagagattt ggtgcttcca gatgtragtt atcaggtgga atccagtgag gaggatcagt    120
ctcagactat ggatcctcaa ggacaaactc tgctgctttt tctctttgtg gatttccaca    180
gtgcatttcc agtccagcaa atggaaatct ggggagtcta tactttgctc acaactcatc    240
tcaatgccat ccttgtggag agccacagtg tagtgcaagg ttccatccaa ttcactgtgg    300
acaaggtctt ggagcaacat caccaggctg ccaaggctca gcagaaacta caggcctcac    360
tctcagtggc tgtgaactcc atcatgagta ttctgactgg aagcactagg agcagcttcc    420
gaaagatgtg tctccagacc cttcaagcag ctgacacaca agagttcagg accaaactgc    480
acaaagtatt tcgtgagatc acccaacacc aatttcttca ccactgctca tgtgaggtga    540
agcagctaac cctagaaaaa aaggactcag cccagggcac tgaggacgca cctgataaca    600
gcagcctgga gctcctagca gataccagcg ggcaagcaga aaacaagagg ctcaagaggg    660
gcagcccccg catagaggag atgcgagctc tgcgctctgc cagggccccg agccgtcag    720
aggccgcccc gcgccgcccg gaagccaccg cggcccccct cactcctaga ggaagggagc    780
accgcgaggc tcacggcagg gccctggcgc cgggcagggc gagcctcgga agccgcctgg    840
aggacgtgct gtggctgcag gaggtctcca acctgtcaga gtggctgagt cccagccctg    900
ggccctgagc cgggtcccct tncgcaagcg cccaccgatc cggargctgc gggcagccgt    960
tatcccgtgg tttaataaag tgccgcgcgc tcaccaaaaa aaaaaaa    1007
```

<210> 30
<211> 2026
<212> DNA
<213> Homo sapiens

<400> 30
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gaattcggca cgagcacgga tccgttgcgg ctgcagctct gcagtcgggc cgttccttcg    60
ccgccgccag gggtagcggt gtagctgcgc agcgtcgcgc gcgctaccgc acccaggttc    120
ggcccgtagg cgtctggcag cccggcgcca tcttcatcga gcgccatggc cgcagcctgc    180
gggccgggag cggccgggta ctgcttgctc ctcggcttgc atttgtttct gctgaccgcg    240
ggccctgccc tgggctggaa cgaccctgac agaatgttgc tgcgggatgt aaaagctctt    300
accctccact atgaccgcta taccacctcc cgcaggctgg atcccatccc acagttgaaa    360
tgtgttggag gcacagctgg ttgtgattct tataccccaa aagtcataca gtgtcagaac    420
aaaggctggg atgggtatga tgtacagtgg gaatgtaaga cggacttaga tattgcatac    480
aaatttggaa aaactgtggt gagctgtgaa ggctatgagt cctctgaaga ccagtatgta    540
```

```
ctaagaggtt cttgtggctt ggagtataat ttagattata cagaacttgg cctgcagaaa    600
ctgaaggagt ctggaaagca gcacggcttt gcctctttct ctgattatta ttataagtgg    660
tcctcggcgg attcctgtaa catgagtgga ttgattacca tcgtggtact ccttgggatc    720
gcctttgtag tctataagct gttcctgagt gacgggcagt attctcctcc accgtactct    780
gagtatcctc cattttccca ccgttaccag agattcacca actcagcagg acctcctccc    840
ccaggcttta agtctgagtt cacaggacca cagaatactg gccatggtgc aacttctggt    900
tttggcagtg cttttacagg acaacaagga tatgaaaatt caggaccagg gttctggaca    960
ggcttgggaa ctggtggaat actaggatat ttgtttggca gcaatagagc ggcaacaccc   1020
ttctcagact cgtggtacta cccgtcctat cctccctcct accctggcac gtggaatagg   1080
gcttactcac cccttcatgg aggctcgggc agctattcgg tatgttcaaa ctcagacacg   1140
aaaaccagaa ctgcatcagg atatggtggt accaggagac gataaagtag aaagttggag   1200
tcaaacactg gatgcagaaa ttttggattt ttcatcactt tctctttaga aaaaaagtac   1260
tacctgttaa caattgggaa aaggggatat tcaaaagttc tgtggtgtta tgtccagtgt   1320
agcttttttgt attctattat ttgaggctaa aagttgatgt gtgacaaaat acttatgtgt   1380
tgtatgtcag tgtaacatgc agatgtatat tgcagttttt gaaagtgatc attactgtgg   1440
aatgctaaaa atacattaat ttctaaaacc tgtgatgccc taagaagcat taagaatgaa   1500
ggtgttgtac taatagaaac taagtacaga aaatttcagt tttaggtggt tgtagctgat   1560
gagttattac ctcatagaga ctataatatt ctatttggta ttatattatt tgatgtttgc   1620
tgttcttcaa acatttaaat caagctttgg actaattatg ctaatttgtg agttctgatc   1680
acttttgagc tctgaagctt tgaatcattc agtggtggag atggccttct ggtaactgaa   1740
tattaccttc tgtaggaaaa ggtggaaaat aagcatctag aaggttgttg tgaatgactc   1800
tgtgctggca aaaatgcttg aaacctctat atttctttcg ttcataagag gtaaaggtca   1860
aattttttcaa caaaagtctt ttaataacaa aagcatgcag ttctctgtga aatctcaaat   1920
attgttgtaa tagtctgttt caatcttaaa aagaatcaat aaaaacaaac aaggggaaaa   1980
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa actcga                   2026
```

<210> 31
<211> 699
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (28)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (44)
<223> n equals a,t,g, or c

<400> 31
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gngtttttttc cagccaggaa gtgaccgnta ctgcagcacg aganagattg gttgggttgg     60
ttgraaatga cyctgaacat ttatttccat tgcaatttct gtggctgagg agacttaaac    120
tttacaagta ttatcctttt aagatcattt taattttagt tgagtgcaga gggcttttat    180
aacaaacgtg cagaaatttt ggagggctgt gattttttcca gtattaaaca tgcatgcatt    240
aatcttgcag tttatttttct cattgtgtat gtatatatcg ctttttctctg cagcacgatt    300
tctctttttga taawkccctt tagggcacaa ctagttatca gtaactgaat gtatcttaat    360
cattatggct gcttctgttt tttcattaac aaaggttatt catatgttag catatagttt    420
ctttgcaccc actatttatg tctgaatcat ttgtcacaag agagtgtgtg ctgatgagat    480
tgtaagtttg tgtgtttaaa cttttttttg agcgagggaa gaaaaagctg tatgcatttc    540
attgctgtct acaggtttct ttcagattat gttcatgggt ttgtgtgtat acaatatgaa    600
```

```
gaatgatctg aagtaattgt gctgtattta tgtttattca ccagtctttg attaaataaa    660
aaggaaaacc agaaaaaaaa aaaaaaaaaa aaaaaaaaa                            699
```

```
<210> 32
<211> 1264
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1057)
<223> n equals a,t,g, or c

<400> 32
ggcacgaggg cactgtttcc tcagtccatg gctgagtaca tcaccggtgt tttctctctt     60
attcctccca tcaagcctaa aaggaatctc tattggagat actgccatta gtgttccttt    120
tataggtgag gaactgaggc atakagggtt ccccagttga accaactgat aaatagtaga    180
acttggattt taattcagtc ttgatgccag ggataaggct cttactttct accttaggct    240
atttctagga aacgcaggag agtgttgaag gggcagagaa agggatccag ttcctttctg    300
tcccgcatcc tagtccctga gaagcaaaga araatgtgtg gcttcttttg ctttgctttt    360
gttgtcatcc cacacatctc caggggamct gggctcttga tcttggsctc ttccccttta    420
actgttaagt gggagcargt aagggggtac agtagggctg gcctggagtt agaggcttgg    480
atgccttagc tcctctgtct gcactccaga actgcctgac ttcatttcgt atgttgtcct    540
ttgtttttgac aattgatcca tgtcccagtc cgtctcttct tccttcttga tacttacact    600
gcttctttct gttggtttcc agtgtttaac actgtataca acagtgacga caacgtgttt    660
gtgggggccc ccacgggcag cgggaagact atttgtgcag agtttgccat cctgcgaatg    720
ctgctgcaga gctcggaggg cgcgctgtgys twcwtcaccm ccatggaggc cctggccaga    780
rcaggtatga cgtggcgctg tgtcatgtga atttcccaag aagcatttca tctgtgattc    840
cgtatgaagg ctttctaagc cctgaaattt gcagggtcat ttcctcagtt tgtgtattaa    900
agaaaagctg ccccagccaa gcgtggtggc tcacgcctgt aatcccagca ctttgggagg    960
ccgaggcggg cagatctccg gagatcagga gttcgagacc agcctggcca acatggtgra   1020
accctgtctc tactaaaawt acagaaatta gctgggngtg gtggtgtgcg cctgtaatcc   1080
cagctacttg gaaggctgag gcaggagaat cgcttgaacc cgggaggcgg aggttgcagt   1140
gagccaagtt cgcaccactg cactccagcc tgggcaacaa gagcgagact tcatctcaaa   1200
aaaaaaaaaa aaaactcga gggggggccc ggtacccaat tcgccctata gtgatcgtat   1260
taca                                                               1264
```

```
<210> 33
<211> 997
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (855)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (881)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (916)
<223> n equals a,t,g, or c
```

```
<220>
<221> SITE
<222> (957)
<223> n equals a,t,g, or c

<400> 33
attggaagtt gttttgcaac ctgggctttt atacagaaga atacgaatca caggtgtgtg        60
agcatctact taattaattt gcttacagcc gatttcctgc ttactctggc attaccagtg       120
aaaattgttg ttgacttggg tgtggcacct tggaagctga agatattcca ctgccaagta       180
acagcctgcc tcatctatat caatatgtat ttatcaatta tcttcttagc atttgtcagc       240
attgaccgct gtcttcagct gacacacagc tgcaagatct accgaataca agaacccgga       300
tttgccaaaa tgatatcaac cgttgtgtgg ctaatggtcc ttcttataat ggtgccaaat       360
atgatgattc ccatcaaaga catcaaggaa aagtcaaatg tgggttgtat ggagtttaaa       420
aaggaatttg gaagaaattg gcatttgctg acaaatttca tatgtgtagc aatattttta       480
aatttctcag ccatcatttt aatatccaat tgccttgtaa ttcgacagct ctacagaaac       540
aaagataatg aaaattaccc aaatgtgaaa aaggctctca tcaacatact tttagtgacc       600
acgggctaca tcatatgctt tgttccttac cacattgtcc gaatcccgta taccctcagc       660
cagacagaag tcataactga ttgctcaacc aggatttcac tcttcaaagc caaagaggct       720
acactgctcc tggctgtgtc gaacctgtgc tttgatccta tcctgtacta tcacctctca       780
aaagcattcc gctcaaaggt cactgagact tttgcctcmc ctaaagagac caaggtyaga       840
aagaaaaatt aagangtgga aataatggct aaaagacagg nttttgtgg taccaattct       900
gggctttatg ggaccntaaa gttattatag cttggaaggt aaaaaaaaaa aaagggnggg       960
cgctctagag gttccccgag gggccagctt agggtgc                                997
```

```
<210> 34
<211> 1914
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1889)
<223> n equals a,t,g, or c

<400> 34
gtgtgagagg cctctctgga agttgtcccg ggtgttcgcc gctggagccc gggtcgagag        60
gacgaggtgc cgctgcctgg agaatcctcc gctgccgtcg gctcccggag cccagccctt       120
tcctaaccca acccaaccta gcccagtccc agccgccagc gcctgtccct gtcacggacc       180
ccagcgttac catgcatcct gccgtcttcc tatccttacc cgacctcaga tgctcccttc       240
tgctcctggt aacttgggtt tttactcctg taacaactga aataacaagt cttgatacag       300
agaatataga tgaaatttta aacaatgctg atgttgcttt agtaaatttt tatgctgact       360
ggtgtcgttt cagtcagatg ttgcatccaa tttttgagga agcttccgat gtcattaagg       420
aagaatttcc aaatgaaaat caagtagtgt ttgccagagt tgattgtgat cagcactctg       480
acatagccca gagatacagg ataagcaaat acccaacccт caaattgttt cgtaatggga       540
tgatgatgaa gagagaatac aggggtcagc gatcagtgaa agcattggca gattacatca       600
ggcaacaaaa aagtgacccc attcaagaaa ttcgggactt agcagaaatc accactcttg       660
atcgcagcaa aagaaatatc attggatatt ttgagcaaaa ggactcggac aactatagag       720
tttttgaacg agtagcgaat attttgcatg atgactgtgc ctttctttct gcatttgggg       780
atgtttcaaa accggaaaga tatagtggcg acaacataat ctacaaacca ccagggcatt       840
ctgctccgga tatggtgtac ttgggagcta tgacaaattt tgatgtgact tacaattgga       900
ttcaagataa atgtgttcct cttgtccgag aaataacatt tgaaaatgga gaggaattga       960
cagaagaagg actgcctttt ctcatactct ttcacatgaa agaagataca gaaagtttag      1020
aaatattcca gaatgaagta gctcggcaat taataagtga aaaaggtaca ataaactttt      1080
tacatgccga ttgtgacaaa tttagacatc ctcttctgca catacagaaa actccagcag      1140
attgtcctgt aatcgctatt gacagcttta ggcatatgta tgtgtttgga gacttcaaag      1200
atgtattaat tcctggaaaa ctcaagcaat tcgtatttga cttacattct ggaaaactgc      1260
```

```
acagagaatt ccatcatgga cctgacccaa ctgatacagc cccaggagag caagcccaag    1320
atgtagcaag cagtccacct gagagctcct tccagaaact agcacccagt gaatataggt    1380
atactctatt gagggatcga gatgagcttt aaaaacttga aaaacagttt gtaagccttt    1440
caacagcagc atcaacctac gtggtggaaa tagtaaacct atattttcat aattctatgt    1500
gtattttat tttgaataaa cagaaagaaa ttttgggttt ttaattttt tctccccgac    1560
tcaaaatgca ttgtcattta atatagtagc ctcttaaaaa aaaaaaaaac ctgctaggat    1620
ttaaaaataa aaatcagagg cctatctcca ctttaaatct gtcctgtaaa agttttataa    1680
atcaaatgaa aggtgacatt gccagaaact taccattaac ttgcactact agggtaggga    1740
ggacttaggg atgtttcctg tgtcgtatgt gctttctttt ctttcatatg atcaattctg    1800
ttggtatttt cagtatctca tttctcaaag ctaaagagat atacattctg gatacttggg    1860
aggggaataa attaaagttt tcacactgna aaaaaaaaaa aaaaaaaac tcga          1914
```

<210> 35
<211> 1020
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (18)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (26)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1014)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1015)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1018)
<223> n equals a,t,g, or c

<400> 35
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gtataattat aaatttgntc ggttcnaccg gtcctgtgtt gcytaaaaac accttataaa    60
agaggagagt atttgataag caattttcat agtagtaaag ttttttttca tctcttaaac    120
taaattgacc atgcatataa tattctttgt ttaaatgaaa gcatactgtt gaaacccgca    180
gtgttgcatt tagaaaacag ttgaacagaa tgtcaatgtg cattcatgca aaaaaacatt    240
taatctgcat ctgtttttaga aaaggggggaa atgaagcaac ttgtctaaaa atactgcttt    300
acaaagcatt tcagcctttc cccctcagtt ttgcattgat tttttgacaa gtctgtagag    360
cctaatagtt tccatcaaag gcctagatct cttatttagc attttttttca gctcttctct    420
cagaagttca gctgttgaaa cgaaactgt actttgtacc ctcacataca aagggatcaa    480
atttgacctg gtgttatttt agccccaaat ttatgacatt acacaatatt aaaatgtaaa    540
tgtttctttta cccaaactac ttctagatat tctagtattt gcttctggtg gaattaaatg    600
acggtaaaat tggctaatta tttgaatgaa tgaatggatg gatgtttgc atgctcaatt    660
tctaggtcct ttgtctagaa aggaaatttg cctcagttga attagtgaaa tatttctgtc    720
gttgatatta aaagtgactt ctgagtacag ttaagttcct cctatttgcc actgggctgt    780
tggttagaag cataggtaac tgattaagta ggtatgatac tgcatttgaa ataagtggac    840
```

```
acaaactatc ctttctccac catggactca atctgagaac aacagcattc atttccattc    900
atttccatac tggcttttga ttatatgcag attcctagta gcatgcctta cctacagcac    960
tatgtgcatt tgctgtcaca ataaagtata ttttgtcttg caaaaaaaa aaannaangg    1020
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<210> 36
<211> 781
<212> DNA
<213> Homo sapiens

<400> 36
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aactcctgac ctcaagtgct ccacctgcgt tggcttccca aagtgctggg atacaggagt     60
ragccactgc gcctggctga tcccagcact tttmaaatga tgccgctcaa agccgtgact    120
tggcctactt tgaacagcaa acttgttgct gctgttgtca acctgaaggc ctctcaaatg    180
ccagcttcaa gcagggtgtg aattggccag tgtcagatct caggagtcct gtgttgagag    240
tgtggctttc agctgcgggg agctgcactt ggtggggaaa gccaggcagg tcaccctcac    300
agccagataa tgtggaggtc agaacccaag gaagggagtg agacctccac tcccagtggg    360
ggacctggcc acccatcctt ggggacctga gaaagcgtac ttcaccttgg ggtgaaggct    420
gggtgggggc agagggacca gtgccctcct cagtgcttag gggcagagcc acctgcagca    480
atggtatctg catattagcc cctctccacc ttctttctcc cgctgaatca tttccctcaa    540
agcccaagag ctgtcactgc ttctttctcc ctgggaagaa tgcgtggact ctgcctggtg    600
atagactgaa gccagaacag tgccacaccc tcgccttaat tccttgctag gtgttctcag    660
atttatgaga cttcttagtc aaatatgagg gaggttggat gtggtggctt gtgcctgtaa    720
tcccagcatt ttgggaagcc gaggtgggag gatcccttga agccaggagt ttgagacaag    780
c                                                                    781
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<210> 37
<211> 966
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (586)
<223> n equals a,t,g, or c

<400> 37
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ccactatngg caattggtac cggccccccc tcgaggaaga taaggtgcag ttcatgccag     60
aatccccagc ttcccatgca ggctggggac atagtgggtt ctcccgaaat actgggtcac    120
ttgaatttga tatgatgtat atatattcac ctctagtcca taggtacata tagtctatat    180
attaaaaaga cattggattt tgacttaaac tagatgtttc tcaagcacac caagacggtg    240
ctagagcctg ggtttggcca gagaattggg tcccggtcag aagtgagtgg ggatggctgg    300
cgagcaaggt gtctgtaggg cagcacagga tgtctggtga gcagacagca agcttctgtc    360
ctgccccgag tgctgaggag cgaggtgact gcctacatgg tgatgsaaag atttgggcac    420
gcttccggct ttcaggccaa acaacctcgc ttgctccatg gcaccactga tcccagcagt    480
ggcccgaggg agctccttcc tgctgcttca tgctctgaca ctttggggggg ctcctttccc    540
caccacgtgg gtctcctgtc agcctcgaag tgtcctgcgc cctcncctg tacgcccagg    600
tgtgcctccc ctggccgcac ytcctctgtg ctcctgcgtc tctctgttct ctctttagagt    660
ggttctgcac gtcagcagca tctgtggtgt ggccctggga cccttcagaa caggggctcc    720
tgcccagctt ctgggtcccc cacctgtggc ccaggaagg ctctttgttc ctcagcccca    780
agctgtatct ggtgagaaca gatgcgtagt cccggagctc aagttctggg aagggcagtg    840
ccctttttctg tggggccctg ggcttgttct gcattgtttc aagaggagct gccactcaaa    900
```

```
taggcagccc tgcaatcgga gggctgcgtg ctccccctga tcagccccca gctgcttcct    960
cgtgcc                                                               966
```

<210> 38
<211> 416
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (395)
<223> n equals a,t,g, or c

```
<400> 38
gaattcggca cgaggtaata ggagccctcg tacctcttgt gttccttaca aacattctca     60
tcagtagctc tacgcgttga ctgggtggtt tgaratggct ggtatacaca gggctttctt    120
ggtgttctgt ctctggggct tarctttgtg tgtggttgga gggccctggt gagattggaa    180
gtaccagaga gtgctgtgtc aggggcagag gggcctgtcg ctggagctgg agggtgcctg    240
cctttgtgtc tgactccartc tcctgtctgc cttgcccct  cagggtctcg ccagcccagc    300
ctctgtggga atctaaaagg artggatgtg gacgtktgac caagcacatc tcagctttta    360
atacctgggc tatttataga cctttggggg gaatngcttg tggaacaaca agggtt        416
```

<210> 39
<211> 1114
<212> DNA
<213> Homo sapiens

```
<400> 39
tgtgtatttg gggggactga agggtacgtg gggcgaaaca aaaccggcca tggcagcagc     60
ggaggaggag gacggggggcc ccgaagccaa aatcgcgagc ggggcggggc gggcgcgacc   120
ttcgaatgta atatatgttt ggagactgct cgggaagctg tggtcagtgt gtgtggccac    180
ctgtactgtt ggccatgtct tcatcagtgg ctggagacac ggccagaacg gcaagagtgt    240
ccagtatgta aagctgggat cagcagagag aaggttgtcc cgctttatgg gcgagggagc    300
cagaagcccc aggatcccag attaaaaact ccacccgcc  cccagggcca gagaccagct    360
ccggagagca gaggggggatt ccagccattt ggtgataccg ggggcttcca cttctcattt   420
ggtgttggtg ctttttcctt tggcttttc  accaccgtct tcaatgccca tgagcctttc    480
cgccggggta caggtgtgga tctgggacag ggtcacccag cctccagctg gcaggattcc    540
ctcttcctgt ttctcgccat cttcttcttt ttttggctgc tcagtatttg agctatgtct    600
gcttcctgcc cacctccagc cagagaagaa tcagtattga gggtccctgc tgacccttcc    660
gtactcctgg acccccttga cccctctatt tctgttggct aaggccagcc ctggacattg     720
tccaggaagg cctggggagg aggagtgaag tctgtgcata gatgggagag ccttctgctc    780
agaggctcac tcagtaacgt tgtttaattc tctgccctgg ggaaggagga tggattgaga    840
gaatgtcttt ctcctctcct aagtctttgc tttccctgat ttcttgattt gatcttcaaa    900
ggtgggcaaa gttccctctg actcttcccc cactccccat cttactgatt taatttaatt    960
tttcactccc cagagtctaa tatggattct gactcttaag tgcttccgcc ccctcactac   1020
ctcctttaat acaaattcaa taaaaaggt  gaaatataaa aaaaaaaaa  aaaaaacycg   1080
gggggggccc cggtccccat tccctttggg gggt                              1114
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<210> 40
<211> 602
<212> DNA
<213> Homo sapiens

<220>
<221> SITE

23

<220>
<221> SITE
<222> (597)
<223> n equals a,t,g, or c

<400> 40
gggtcgaccc acgcgtccgt cccaggccac aagacatttc ctgctcggaa ccttgtttac   60
taattgtctc tgtggcacat tttgtttccc gtgccttggg tgtcaagttg cagctgatat   120
gaatgaatgc tgtctgtgtg gaacaagcgt cgcaatgagg actctctaca ggacccgata   180
tggcatccct ggatctattt gtgatgacta tatggcaact ctttgctgtc ctcattgtac   240
tctttgccaa atcaagagag atatcaacag aaggagagcc atgcgtactt tctaaaaact   300
gatggtgaaa agctcttacc gaagcaacaa aattcagcag acacctcttc agcttgagtt   360
cttcaccatc ttttgcaact gaaatatgat ggatatgctt aagtacaact gatggcatga   420
aaaaaatcaa attttttgatt tattataaat gaatgttgtc cctgaactta gctaaatggt   480
gcaacttagt ttctccttgc tttcatatta tcgaatttcc tggcttataa acttttttaaa   540
ttacatttga aatataaacc aaatgaaata ttttactgaa aaaaaaaaaa aaaaaanccc   600
ca   602

<210> 41
<211> 970
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (37)
<223> n equals a,t,g, or c

<400> 41
ggcagagctt aggagaacag ctccctttgg atccctntca aaggtgatac cattggctcc   60
cagcttagag taagaagctc tgagaagttg aatgaagggt gagatagaga tgctgaaccc   120
attcttscag cttcttctag tgttgttatt tccagaatgg ccaacacccc tacattgata   180
cataaacaca ttccaaggcc ttgtgtaata caaagttcac cgtcctcctg aataggagc   240
cctgggttct agttctcact ctgccactgg gggaaaatcc aattaaagtc tggtttagtc   300
agcttgggtc accatagact gggtggctta aacagcagac atttatttct ggtagtttct   360
ggaggctaca aatctaagag caaggtgcca gcatggtcac attctggtga gggscctctt   420
cctggcttgt agacggctgc yttctcaccg tgtgctcaca tagcctttcg tgtgtgtgtg   480
tgtgtgtgtg tgcgtkcgtg caagcttcck gatgtctctt cttagaagga caccaacccc   540
atcatgagag ccctactctc atgacttagc ctaaccctaa ttaccctcca aaggccccat   600
ctccaaatgc catcacattg gagggtagag cttcaacata gggatttgg gggacacaaa   660
cattcagtcc ataacaaagg ctgtagtcct tartttcctt gtctgtgaaa tgagagtgtt   720
gagattcttt ctagccttta tcatttataa ttctgtgaga tgtagatttg cattatttc   780
gagttcgagt tatatgaaat gtttccctct acattttctt gggcaactga gaactgaata   840
gggctaggtt taaatagagt taggcagtta ggcttattct tttatttaat aagcattttt   900
ggagcatcta cggtgttcca ggaactgaac tgttgtaaac attggagctg taacagagaa   960
caaaagagac   970

<210> 42
<211> 1002
<212> DNA
<213> Homo sapiens

<400> 42
gaattcggca cgagccgagg tcggcagcac agagctctgg agatgaagac cctgttcctg   60
ggtgtcacgc tcggmctggc cgctgccctg tccttmaccc tggrggagga ggatatcaca   120
gggacctggt acgtgaaggc catggtggtc gataagactt ccggagaca ggaggcccag   180
aaggtgtccc cagtgaaggt gacagccctg ggcggtggga agttggaagc cacgttcacc   240
ttcatgaggg aggatcggtg catccagaag aaaatcctgr tgcggaagac ggaggagcct   300

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ggcaaataca gcgcctgtga gcccctcccc caytcccacc cccaccytcc cccaccgcca      360
accccagtgc accagcctcc acaggtagag agtgcccagg ctgccctttt gccagggccc      420
cagctctgcc cacctccaag gaggggctgg cctctccttc ctgggggggct ggtggcccctg     480
acatcagaca ccgggtgtga caggcttgtc cgcagtcgag atggaccaga tcacgcctgc      540
cctctgggag gccctagcca ttgacacatt gaggaagctg aggattggga caaggaggcc      600
aaggattaga tggggggcagg aagctcatgt acctgcagga gctgcccagg agggaccayt     660
acatctttta ctgcaaagac cagcaccatg ggggcstgct ccacatggga aagcttgtgg      720
gtaggaattc tgataccaac cgggaggccc tggaagaatt taagaaattg gtgcagcgca      780
agggactctc ggaggaggac attttcacgc ccctgcagac gggaagctgc gttcccgaac      840
actaggcagc ccccgggtct gcacctccag agcccaccct accaccagac acagagcccg      900
gaccacctgg acctaccctc cagccatgac ccttccctgc tcccacccac ctgactccaa      960
ataaagtcct tctcccccaa aaaaaaaaa aaaaaaactc ga                         1002
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<210> 43
<211> 2581
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1591)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1703)
<223> n equals a,t,g, or c

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<400> 43
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ccagcttctc ccagcccctc ttccaggctg tggstgccat ctgccgcctc ctcagcatcc      180
ggcaccccga ggagctgtcc ctgctccggg ctcctgagaa gaaggagaag aagaagaaag      240
agaaggagcc agaggaagag ctctatgact tgagcaaggt tgtcttggct gggggggcgtgg     300
cacctgcact gttccggggg atgccagctc acttctcgga cagcgcccag actgaggcct      360
gctaccacat gctgagccgg ccccagccgc cacccgaccc cctcctgctc cagcgtctgc      420
cacggcccag ctccctgtca gacaagaccc agctccacag caggtggctg gactcgtcgc      480
ggtgtctcat gcagcagggc atcaaggccg gggacgcact ctggctgcgc ttcaagtact      540
acagcttctt cgatttggat cccaagacag accccgtgcg gctgacacag ctgtatgagc      600
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ccattcagca gctcaacctc aagggctgtg aggtggttcc cgatgttaac gtctccggcc     1020
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gtgccaggat gagcagcagt atgcccgctg gatggctggc tgccgcctgg cctccaaagg     1140
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cctgcagcgc acgggcagtg ggggcccggg caaccacccc acggccctg atgcctctgc      1260
cgagggcctc aaccctacg gcctcgttgc ccccgtttc cagcgaaagt tcaaggccaa       1320
gcagctcacc ccacggatcc tggaagccca ccagaätgtg gcccagttgt cgctggcaga     1380
ggcccagctg cgcttcatcc aggcctggca gtccctgccc gacttcggca tctcctatgt     1440
catggtcagg ttcaagggca gcaggaaaga cgagatcctg ggcatcgcca acaaccgact     1500
gatccgcatc gacttggccg tgggcgacgt ggtcaagacc tggcgtttca gcaacatgcg     1560
ccagtggaat gtcaactggg acatccggca ngtggccatc gagtttgatg aacacatcaa     1620
tgtggccttc agctgcgtgt ctgccagctg ccgaattgta cacgagtata tcgggggcta     1680
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attggcagag cggaagaagg gtattccatc tgctgacaga gccagagatg tgactcatgc    2520
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c                                                                    2581
```

<210> 44
<211> 796
<212> DNA
<213> Homo sapiens

<400> 44
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tttctcactc agcaaaattg tgggggtccc tagtcagcag ctccctgggc agctctctga     180
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cgccgtcccg ggagcccggc tcccaggcct ctcgttttcc cctacctccc taagactttt     660
ctgtcactct ctggccattg aaaggcttct gttccttaaa gtgctgttac actctccttt     720
cccaggatgc agcaagccaa aacagtacca ctgcacgtca gcctgggtga cagagtgaga     780
ccctatctta aaaaaa                                                    796
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<210> 45
<211> 2017
<212> DNA
<213> Homo sapiens

<400> 45
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cgtagcgtct ggcagcccgg cgccatcttc atcgagcgcc atggccgcag cctgcgggcc    180
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gcctgggctg gaacgaccct gacagaatgt tgctgcggga tgtaaaagct cttaccctcc    300
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ggatgggtat gatgtacagt gggaatgtaa gacggactta gatattgcat acaaatttgg    480
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gtctggaaag cagcacggct ttgcctcttt ctctgattat tattataagt ggtcctcggc    660
ggattcctgt aacatgagtg gattgattac catcgtggta ctccttggga tcgcctttgt    720
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agtctataag ctgttcctga gtgacgggca gtattctcct ccaccgtact ctgagtatcc      780
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actaatagaa actaagtaca gaaaatttca gttttaggtg gttgtagctg atgagttatt     1560
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gctctgaagc tttgaatcat tcagtggtgg agatggcctt ctggtaactg aatattacct     1740
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caaaaatgct tgaaacctct atatttcttt cgttcataag aggtaaaggt caaatttttc     1860
aacaaaagtc ttttaataac aaaagcatgc agttctctgt gaaatctcaa atattgttgt     1920
aatagtctgt ttcaatctta aaaagaatca ataaaaacaa acaagggaaa aaaaaaaaa      1980
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa                              2017
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<210> 46
<211> 981
<212> DNA
<213> Homo sapiens

<400> 46

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cccctccccc aytcccaccc ccaccytccc ccaccgccaa ccccagtgca ccagcctcca      360
caggtagaga gtgcccaggc tgcccttttg ccagggcccc agctctgccc acctccaagg      420
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aggcttgtcc gcagtcgaga tggaccagat cacgcctgcc ctctgggagg ccctagccat      540
tgacacattg aggaagctga ggattgggac aaggaggcca aggattagat gggggcagga      600
agctcatgta cctgcaggag ctgcccagga gggaccayta catcttttac tgcaaagacc      660
agcaccatgg gggcstgctc cacatgggaa agcttgtggg taggaattct gataccaacc      720
gggaggccct ggaagaattt aagaaattgg tgcagcgcaa gggactctcg gaggaggaca      780
ttttcacgcc cctgcagacg ggaagctgcr ttcccgaaca ctaggcagcc cccgggtctg      840
cacctccaga gcccacccta ccaccagaca cagagcccgg accacctgga cctaccctcc      900
agccatgacc cttccctgct cccacccacc tgactccaaa taaagtcctt ctcccccaaa      960
aaaaaaaaaa aaaaactcg a                                                 981
```

<210> 47
<211> 146
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (146)
<223> Xaa equals stop translation

<400> 47
Met His Tyr Gln Met Ser Val Thr Leu Lys Tyr Glu Ile Lys Lys Leu
1   5   10   15

Ile Tyr Val His Leu Val Ile Trp Leu Leu Leu Val Ala Lys Met Ser
            20   25   30

Val Gly His Leu Arg Leu Leu Ser His Asp Gln Val Ala Met Pro Tyr
            35   40   45

Gln Trp Glu Tyr Pro Tyr Leu Leu Ser Ile Leu Pro Ser Leu Leu Gly
    50   55   60

Leu Leu Ser Phe Pro Arg Asn Asn Ile Ser Tyr Leu Val Leu Ser Met
65   70   75   80

Ile Ser Met Gly Leu Phe Ser Ile Ala Pro Leu Ile Tyr Gly Ser Met
                85   90   95

Glu Met Phe Pro Ala Ala Gln Pro Ser Thr Ala Met Ala Arg Pro Thr
                100   105   110

Val Ser Ser Leu Val Phe Leu Pro Phe Pro Ser Cys Thr Trp Cys Trp
        115   120   125

Cys Trp Gln Cys Lys Cys Met Pro Gly Ser Cys Thr Thr Ala Arg Ser
    130   135   140

Ser Xaa
145

<210> 48
<211> 312
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (312)
<223> Xaa equals stop translation

<400> 48
Met Asn Ser Val Val Ser Leu Leu Leu Ile Leu Glu Pro Asp Lys Gln
1   5   10   15

Glu Ala Leu Ile Glu Ser Leu Cys Glu Lys Leu Val Lys Phe Arg Glu
            20   25   30

Gly Glu Arg Pro Ser Leu Arg Leu Gln Leu Leu Ser Asn Leu Phe His
            35   40   45

Gly Met Asp Lys Asn Thr Pro Val Arg Tyr Thr Val Tyr Cys Ser Leu
    50   55   60

Ile Lys Val Ala Ala Ser Cys Gly Ala Ile Gln Tyr Ile Pro Thr Glu
65   70   75   80

```
Leu Asp Gln Val Arg Lys Trp Ile Ser Asp Trp Asn Leu Thr Thr Glu
                85                  90                  95

Lys Lys His Thr Leu Leu Arg Leu Leu Tyr Glu Ala Leu Val Asp Cys
            100             105             110

Lys Lys Ser Asp Ala Ala Ser Lys Val Met Val Glu Leu Leu Gly Ser
            115             120             125

Tyr Thr Glu Asp Asn Ala Ser Gln Ala Arg Val Asp Ala His Arg Cys
    130             135             140

Ile Val Arg Ala Leu Lys Asp Pro Asn Ala Phe Leu Phe Asp His Leu
145             150             155             160

Leu Thr Leu Lys Pro Val Lys Phe Leu Glu Gly Glu Leu Ile His Asp
            165             170             175

Leu Leu Thr Ile Phe Val Ser Ala Lys Leu Ala Ser Tyr Val Lys Phe
            180             185             190

Tyr Gln Asn Asn Lys Asp Phe Ile Asp Ser Leu Gly Leu Leu His Glu
    195             200             205

Gln Asn Met Ala Lys Met Arg Leu Leu Thr Phe Met Gly Met Ala Val
    210             215             220

Glu Asn Lys Glu Ile Ser Phe Asp Thr Met Gln Gln Glu Leu Gln Ile
225             230             235             240

Gly Ala Asp Asp Val Glu Ala Phe Val Ile Asp Ala Val Arg Thr Lys
            245             250             255

Met Val Tyr Cys Lys Ile Asp Gln Thr Gln Arg Lys Val Val Val Ser
            260             265             270

His Ser Thr His Arg Thr Phe Gly Lys Gln Gln Trp Gln Gln Leu Tyr
    275             280             285

Asp Thr Leu Asn Ala Trp Lys Gln Asn Leu Asn Lys Val Lys Asn Ser
    290             295             300

Leu Leu Ser Leu Ser Asp Thr Xaa
305             310
```

<210> 49
<211> 64
<212> PRT
<213> Homo sapiens

<400> 49
```
Met Met Ser Phe Phe Cys Phe Val Met Gly Val Thr Val Ala Ala Thr
1               5               10              15

Phe Thr Ala Ile Val Pro Arg Trp Arg Leu Ser Gln Lys Glu Ile Gly
            20              25              30
```

Ser Val Leu Ser Val Trp Leu Ser Arg Trp Arg Glu Asn Ser Leu Arg
          35   40   45

Ser Leu Val Ser Gln Ser Val Ala Arg Ser Gly Lys Val Val Ile Arg
          50   55   60

<210> 50
<211> 467
<212> PRT
<213> Homo sapiens

<400> 50
Met Leu Ser Arg Pro Gln Pro Pro Asp Pro Leu Leu Leu Gln Arg
 1   5   10   15

Leu Pro Arg Pro Ser Ser Leu Ser Asp Lys Thr Gln Leu His Ser Arg
          20   25   30

Trp Leu Asp Ser Ser Arg Cys Leu Met Gln Gln Gly Ile Lys Ala Gly
          35   40   45

Asp Ala Leu Trp Leu Arg Phe Lys Tyr Tyr Ser Phe Phe Asp Leu Asp
    50   55   60

Pro Lys Thr Asp Pro Val Arg Leu Thr Gln Leu Tyr Glu Gln Ala Arg
 65   70   75   80

Trp Asp Leu Leu Leu Glu Glu Ile Asp Cys Thr Glu Glu Glu Met Met
             85   90   95

Val Phe Ala Ala Leu Gln Tyr His Ile Asn Lys Leu Ser Gln Ser Gly
         100   105   110

Glu Val Gly Glu Pro Ala Gly Thr Asp Pro Gly Leu Asp Asp Leu Asp
         115   120   125

Val Ala Leu Ser Asn Leu Glu Val Lys Leu Glu Gly Ser Ala Pro Thr
    130   135   140

Asp Val Leu Asp Ser Leu Thr Thr Ile Pro Glu Leu Lys Asp His Leu
 145   150   155   160

Arg Ile Phe Arg Pro Arg Lys Leu Thr Leu Lys Gly Tyr Arg Gln His
         165   170   175

Trp Val Val Phe Lys Glu Thr Thr Leu Ser Tyr Tyr Lys Ser Gln Asp
         180   185   190

Glu Ala Pro Gly Asp Pro Ile Gln Gln Leu Asn Leu Lys Gly Cys Glu
         195   200   205

Val Val Pro Asp Val Asn Val Ser Gly Gln Lys Phe Cys Ile Lys Leu
    210   215   220

```
Leu Val Pro Ser Pro Glu Gly Met Ser Glu Ile Tyr Leu Arg Cys Gln
225             230             235             240

Asp Glu Gln Gln Tyr Ala Arg Trp Met Ala Gly Cys Arg Leu Ala Ser
            245             250             255

Lys Gly Arg Thr Met Ala Asp Ser Ser Tyr Thr Ser Glu Val Gln Ala
            260             265             270

Ile Leu Ala Phe Leu Ser Leu Gln Arg Thr Gly Ser Gly Gly Pro Gly
        275             280             285

Asn His Pro His Gly Pro Asp Ala Ser Ala Glu Gly Leu Asn Pro Tyr
    290             295             300

Gly Leu Val Ala Pro Arg Phe Gln Arg Lys Phe Lys Ala Lys Gln Leu
305             310             315             320

Thr Pro Arg Ile Leu Glu Ala His Gln Asn Val Ala Gln Leu Ser Leu
            325             330             335

Ala Glu Ala Gln Leu Arg Phe Ile Gln Ala Trp Gln Ser Leu Pro Asp
            340             345             350

Phe Gly Ile Ser Tyr Val Met Val Arg Phe Lys Gly Ser Arg Lys Asp
        355             360             365

Glu Ile Leu Gly Ile Ala Asn Asn Arg Leu Ile Arg Ile Asp Leu Ala
    370             375             380

Val Gly Asp Val Val Lys Thr Trp Arg Phe Ser Asn Met Arg Gln Trp
385             390             395             400

Asn Val Asn Trp Asp Ile Arg Gln Val Ala Ile Glu Phe Asp Glu His
            405             410             415

Ile Asn Val Ala Phe Ser Cys Val Ser Ala Ser Cys Arg Ile Val His
            420             425             430

Glu Tyr Ile Gly Gly Tyr Ile Phe Leu Ser Thr Arg Glu Arg Ala Arg
    435             440             445

Gly Glu Glu Leu Asp Glu Asp Leu Phe Leu Gln Leu Thr Gly Gly His
    450             455             460

Glu Ala Phe
465


<210> 51
<211> 83
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (83)
```

<223> Xaa equals stop translation

<400> 51
Met Arg Pro Gly Arg Gly Ala Gly Thr Pro Gly Arg Pro Gly Arg Gly
1   5   10   15

Arg Gly Leu Ala Ala Thr Cys Ser Leu Ser Ser Pro Ser His Leu Leu
            20   25   30

Pro Thr Leu Leu His Thr Phe Ser Phe Ser Leu Pro Pro Pro Ser Pro
            35   40   45

Ala Ala Pro Arg Gln Pro Ser Pro Pro Ala Leu Leu Leu Pro Gly Pro
        50   55   60

Gln Lys Pro Arg Pro Gly Asp Pro Thr Tyr Thr Gly Ala Leu Thr Asp
65   70   75   80

Trp Ser Xaa

<210> 52
<211> 63
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (63)
<223> Xaa equals stop translation

<400> 52
Met Phe Leu Val Phe Phe Leu Ser Phe Phe Ser His Ser Ile Ser Ala
1   5   10   15

Leu Thr Leu Val Cys Ser Gln Gly Gly Lys Ala Asp Met Asn Leu Leu
            20   25   30

Ser Trp Asp Phe Arg Pro His Trp Leu Glu Gly Ile Arg Phe Leu Leu
            35   40   45

Gly Trp Gly Gln Ala Leu Met Ala Gly Leu Phe Pro Trp Leu Xaa
        50   55   60

<210> 53
<211> 124
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (114)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE

<222> (124)
<223> Xaa equals stop translation

<400> 53
Met Arg Gly Ser Trp His Arg Ser Pro Leu Pro Ala Val Val Leu Pro
1   5   10   15

Ser Val Leu Gln Thr Ala Leu Ser Pro Leu Ala Leu Cys Gln Ala Trp
            20   25   30

Arg Arg Ala Val Pro His Gly Val Pro Ser Gln Arg Leu Arg Asn Gln
        35   40   45

Glu Ala Ser Leu Val Pro Lys Gly Val Pro Arg Ala Trp Tyr Pro Gly
    50   55   60

Pro Leu Gln Asn Gly Leu Trp Thr His Leu Glu Lys Gly Glu Leu Leu
65   70   75   80

Gly Leu Lys Pro Thr Pro Gly Gly Leu Leu Leu Leu Arg Ser Phe Trp
            85   90   95

Asp Pro His Pro Ser Arg Pro Phe Leu Cys Thr Leu Leu Pro Pro Pro
            100   105   110

Leu Xaa Ile Phe Pro Pro Leu Arg Cys Ser Ala Xaa
    115   120

<210> 54
<211> 180
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (84)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (86)
<223> Xaa equals any of the naturally occurring L-amino acids

```
<220>
<221> SITE
<222> (99)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (180)
<223> Xaa equals stop translation

<400> 54
Met Thr Ser Ala Gly Pro Val Xaa Leu Phe Leu Leu Val Ser Ile Ser
1               5               10              15

Thr Ser Val Ile Leu Met Gln His Leu Leu Xaa Ala Ser Tyr Cys Asp
            20              25              30

Leu Leu His Lys Ala Ala Ala His Leu Gly Cys Trp Gln Lys Val Asp
        35              40              45

Pro Ala Leu Cys Ser Asn Val Leu Gln His Pro Trp Thr Glu Glu Cys
    50              55              60

Met Trp Pro Gln Gly Val Leu Val Lys His Ser Lys Asn Val Tyr Lys
65              70              75              80

Ala Val Gly Xaa Xaa Xaa Val Ala Ile Pro Ser Asp Val Ser His Phe
            85              90              95

Arg Phe Xaa Phe Phe Phe Ser Lys Pro Leu Arg Ile Leu Asn Ile Leu
        100             105             110

Leu Leu Leu Glu Gly Ala Val Ile Val Tyr Gln Leu Tyr Ser Leu Met
        115             120             125

Ser Ser Glu Lys Trp His Gln Thr Ile Ser Leu Ala Leu Ile Leu Phe
130             135             140

Ser Asn Tyr Tyr Ala Phe Phe Lys Leu Leu Arg Asp Arg Leu Val Leu
145             150             155             160

Gly Lys Ala Tyr Ser Tyr Ser Ala Ser Pro Gln Arg Asp Leu Asp His
            165             170             175

Arg Phe Ser Xaa
            180


<210> 55
<211> 287
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (221)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<220>
<221> SITE
<222> (287)
<223> Xaa equals stop translation

<400> 55

```
Met Pro Leu Phe Lys Leu Tyr Met Val Met Ser Ala Cys Phe Leu Ala
 1               5                  10                  15

Ala Gly Ile Phe Trp Val Ser Ile Leu Cys Arg Asn Thr Tyr Ser Val
            20                  25                  30

Phe Lys Ile His Trp Leu Met Ala Ala Leu Ala Phe Thr Lys Ser Ile
        35                  40                  45

Ser Leu Leu Phe His Ser Ile Asn Tyr Tyr Phe Ile Asn Ser Gln Gly
    50                  55                  60

Pro Pro His Arg Arg Pro Cys Arg His Val Leu His Arg Thr Pro Ala
 65                  70                  75                  80

Glu Gly Arg Pro Pro Leu His His His Arg Pro Asp Trp Leu Arg Leu
            85                  90                  95

Gly Phe Ile Lys Tyr Val Leu Ser Asp Lys Glu Lys Lys Val Phe Gly
           100                 105                 110

Ile Val Ile Pro Met Gln Val Leu Ala Asn Val Ala Tyr Ile Ile Ile
           115                 120                 125

Glu Ser Arg Glu Glu Gly Ala Thr Asn Tyr Val Leu Trp Lys Glu Ile
    130                 135                 140

Leu Phe Leu Val Asp Leu Ile Cys Cys Gly Ala Ile Leu Phe Pro Val
145                 150                 155                 160

Val Trp Ser Ile Arg His Leu Gln Asp Ala Ser Gly Thr Asp Gly Lys
                165                 170                 175

Val Ala Val Asn Leu Ala Lys Leu Lys Leu Phe Arg His Tyr Tyr Val
            180                 185                 190

Met Val Ile Cys Tyr Val Tyr Phe Thr Arg Ile Ile Ala Ile Leu Leu
            195                 200                 205

Gln Val Ala Val Pro Phe Gln Trp Gln Trp Leu Tyr Xaa Leu Leu Val
    210                 215                 220

Glu Gly Ser Thr Leu Ala Phe Phe Val Leu Thr Gly Tyr Lys Phe Gln
225                 230                 235                 240

Pro Thr Gly Asn Asn Pro Tyr Leu Gln Leu Pro Gln Glu Asp Glu Glu
            245                 250                 255

Asp Val Gln Met Glu Gln Val Met Thr Asp Ser Gly Phe Arg Glu Gly
            260                 265                 270
```

Leu Ser Lys Val Asn Lys Thr Ala Ser Gly Arg Glu Leu Leu Xaa
    275   280   285

<210> 56
<211> 34
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (34)
<223> Xaa equals stop translation

<400> 56
Met Pro Met Val Phe Leu Leu Leu Phe Asn Leu Met Ser Trp Leu Ile
  1   5   10   15

Arg Asn Ala Arg Val Ile Leu Arg Ser Leu Asn Leu Lys Arg Asp Gln
         20   25   30

Val Xaa

<210> 57
<211> 24
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (24)
<223> Xaa equals stop translation

<400> 57
Met Lys Ile Val Val Leu Leu Pro Leu Phe Leu Leu Ala Thr Phe Pro
  1   5   10   15

Arg Lys Leu Gln Thr Cys Leu Xaa
         20

<210> 58
<211> 47
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (47)
<223> Xaa equals stop translation

<400> 58
Met Ser Gly Gly Glu Gly Ala Ala Leu Pro Ile Leu Leu Leu Leu Leu
  1   5   10   15

Ala Leu Arg Gly Thr Phe His Gly Ala Arg Pro Gly Gly Gly Ala Ser

```
                 20                      25                      30

      Gly Ile Trp Cys Leu Leu Leu Pro Glu Gln Glu Pro Pro Val Xaa
              35                      40                      45
```

<210> 59
<211> 114
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (114)
<223> Xaa equals stop translation

<400> 59

```
Met Ala Arg Gly Ser Leu Arg Arg Leu Leu Arg Leu Leu Val Leu Gly
 1               5                  10                  15

Leu Trp Leu Ala Leu Leu Arg Ser Val Ala Gly Glu Gln Ala Pro Gly
              20                  25                  30

Thr Ala Pro Cys Ser Arg Gly Ser Ser Trp Ser Ala Asp Leu Asp Lys
              35                  40                  45

Cys Met Asp Cys Ala Ser Cys Arg Ala Arg Pro His Ser Asp Phe Cys
     50                  55                  60

Leu Gly Cys Ala Ala Ala Pro Pro Ala Pro Phe Arg Leu Leu Trp Pro
 65                  70                  75                  80

Ile Leu Gly Gly Ala Leu Ser Leu Thr Phe Val Leu Gly Leu Leu Ser
                 85                  90                  95

Gly Phe Leu Val Trp Arg Arg Cys Arg Arg Glu Arg Ser Ser Pro Pro
                100                 105                 110

Pro Xaa
```

<210> 60
<211> 32
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (32)
<223> Xaa equals stop translation

<400> 60

```
Met Val Cys Ile Leu Val Leu Thr Leu Val Ser Tyr Ser Ser Leu Val
1               5                   10                  15

Asn Ser Pro Leu Pro Phe Val His Leu Xaa Val Gly Ile Ser Ala Xaa
            20                  25                  30
```

<210> 61
<211> 81
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (81)
<223> Xaa equals stop translation

<400> 61
```
Met Thr Gly Gly Phe Leu Ser Cys Ile Leu Gly Leu Val Leu Pro Leu
1               5                   10                  15

Ala Tyr Xaa Ser Ser Leu Thr Trp Cys Trp Trp Arg Trp Gly Leu Pro
            20                  25                  30

Xaa Pro Ala Gly Pro Pro Arg Cys Thr Pro Gly Cys Asn Ala Ser Gly
            35                  40                  45

Ala Gly Arg Gly Pro Ser Pro Gly Pro Pro Gly Gly Glu Leu His Thr
        50                  55                  60

Pro Ala Ser Arg Asp Pro Gly Pro Gly Ala Glu Trp Arg Gly Thr Ser
65                  70                  75                  80

Xaa
```

<210> 62
<211> 104
<212> PRT
<213> Homo sapiens

<400> 62
```
Met Ala Ala Pro Val Asp Leu Glu Leu Lys Lys Ala Phe Thr Glu Leu
1               5                   10                  15
```

```
Gln Ala Lys Val Ile Asp Thr Gln Gln Lys Val Lys Leu Ala Asp Ile
            20                  25                  30

Gln Ile Glu Gln Leu Asn Arg Thr Lys Lys His Ala His Leu Thr Asp
            35                  40                  45

Thr Glu Ile Met Thr Leu Val Asp Glu Thr Asn Met Tyr Glu Gly Val
        50                  55                  60

Gly Arg Met Phe Ile Leu Gln Ser Lys Glu Ala Ile His Ser Gln Leu
65                  70                  75                  80

Leu Glu Lys Gln Lys Ile Ala Glu Glu Lys Ile Lys Glu Leu Glu Gln
                85                  90                  95

Lys Lys Ser Tyr Leu Glu Arg Arg
            100
```

<210> 63
<211> 146
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (146)
<223> Xaa equals stop translation

<400> 63
```
Met Pro Ser Gly Phe Gln Thr Cys Leu Leu Phe Thr Leu Ser Pro Phe
1               5                  10                  15

Ser Leu Ser Lys Ile Val Gly Val Pro Ser Gln Gln Leu Pro Gly Gln
            20                  25                  30

Leu Ser Glu Gln Gly Gly Leu Cys Gly His Glu Gly Glu Pro Ala Arg
            35                  40                  45

Thr Val Pro Glu Thr Gln Leu Pro Leu Pro Phe Asn Ser Ala Gly Pro
        50                  55                  60

Pro His Leu Lys Cys Thr Gly Ala Gly Lys Arg Val Trp Ser Pro Pro
65                  70                  75                  80

Arg Arg Ala Ala Gln Glu Val Ser Leu Gln Leu Val Ser Cys His Pro
                85                  90                  95

Cys Arg Gln His Thr Ser Arg Ala Phe Ser Leu Ala Thr Asp Arg Thr
            100                 105                 110

Ala Ser Ala Arg Val Cys Cys Arg Ser Pro Leu Ser Thr Leu Ile His
            115                 120                 125

His Thr Arg Gly Gly Gln Arg Cys Arg Glu His Gly Leu Ser Leu Pro
            130                 135                 140
```

Leu Xaa
145

<210> 64
<211> 31
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (31)
<223> Xaa equals stop translation

<400> 64
Met Ala Ile Leu Met Leu Leu Ala Gly Ser Pro Cys Thr Leu Ser Phe
1   5   10   15

Ser Thr Asp Thr Gly Ser Ser Ala Pro Gly Pro Lys Ile Pro Xaa
            20   25   30

<210> 65
<211> 260
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (260)
<223> Xaa equals stop translation

<400> 65
Met Asp Pro Gln Gly Gln Thr Leu Leu Leu Phe Leu Phe Val Asp Phe
1   5   10   15

His Ser Ala Phe Pro Val Gln Gln Met Glu Ile Trp Gly Val Tyr Thr
            20   25   30

Leu Leu Thr Thr His Leu Asn Ala Ile Leu Val Glu Ser His Ser Val
        35   40   45

Val Gln Gly Ser Ile Gln Phe Thr Val Asp Lys Val Leu Glu Gln His
    50   55   60

His Gln Ala Ala Lys Ala Gln Gln Lys Leu Gln Ala Ser Leu Ser Val
65   70   75   80

Ala Val Asn Ser Ile Met Ser Ile Leu Thr Gly Ser Thr Arg Ser Ser
                85   90   95

Phe Arg Lys Met Cys Leu Gln Thr Leu Gln Ala Ala Asp Thr Gln Glu
            100   105   110

Phe Arg Thr Lys Leu His Lys Val Phe Arg Glu Ile Thr Gln His Gln
        115   120   125

Phe Leu His His Cys Ser Cys Glu Val Lys Gln Leu Thr Leu Glu Lys

```
              130                    135                      140
Lys Asp Ser Ala Gln Gly Thr Glu Asp Ala Pro Asp Asn Ser Ser Leu
145                  150                  155                  160

Glu Leu Leu Ala Asp Thr Ser Gly Gln Ala Glu Asn Lys Arg Leu Lys
                165                  170                  175

Arg Gly Ser Pro Arg Ile Glu Glu Met Arg Ala Leu Arg Ser Ala Arg
                180                  185                  190

Ala Pro Ser Pro Ser Glu Ala Ala Pro Arg Arg Pro Glu Ala Thr Ala
                195                  200                  205

Ala Pro Leu Thr Pro Arg Gly Arg Glu His Arg Glu Ala His Gly Arg
210                  215                  220

Ala Leu Ala Pro Gly Arg Ala Ser Leu Gly Ser Arg Leu Glu Asp Val
225                  230                  235                  240

Leu Trp Leu Gln Glu Val Ser Asn Leu Ser Glu Trp Leu Ser Pro Ser
                245                  250                  255

Pro Gly Pro Xaa
                260
```

<210> 66
<211> 339
<212> PRT
<213> Homo sapiens

<400> 66

```
Met Ala Ala Ala Cys Gly Pro Gly Ala Ala Gly Tyr Cys Leu Leu Leu
 1               5               10                  15

Gly Leu His Leu Phe Leu Leu Thr Ala Gly Pro Ala Leu Gly Trp Asn
                20                  25                  30

Asp Pro Asp Arg Met Leu Leu Arg Asp Val Lys Ala Leu Thr Leu His
            35                  40                  45

Tyr Asp Arg Tyr Thr Thr Ser Arg Arg Leu Asp Pro Ile Pro Gln Leu
    50                  55                  60

Lys Cys Val Gly Gly Thr Ala Gly Cys Asp Ser Tyr Thr Pro Lys Val
65                  70                  75                  80

Ile Gln Cys Gln Asn Lys Gly Trp Asp Gly Tyr Asp Val Gln Trp Glu
                85                  90                  95

Cys Lys Thr Asp Leu Asp Ile Ala Tyr Lys Phe Gly Lys Thr Val Val
                100                 105                 110

Ser Cys Glu Gly Tyr Glu Ser Ser Glu Asp Gln Tyr Val Leu Arg Gly
            115                 120                 125

Ser Cys Gly Leu Glu Tyr Asn Leu Asp Tyr Thr Glu Leu Gly Leu Gln
```

```
        130                    135                    140

Lys Leu Lys Glu Ser Gly Lys Gln His Gly Phe Ala Ser Phe Ser Asp
145                 150                 155                     160

Tyr Tyr Tyr Lys Trp Ser Ser Ala Asp Ser Cys Asn Met Ser Gly Leu
                165                 170                     175

Ile Thr Ile Val Val Leu Leu Gly Ile Ala Phe Val Val Tyr Lys Leu
            180                 185                 190

Phe Leu Ser Asp Gly Gln Tyr Ser Pro Pro Pro Tyr Ser Glu Tyr Pro
        195                 200                 205

Pro Phe Ser His Arg Tyr Gln Arg Phe Thr Asn Ser Ala Gly Pro Pro
    210                 215                 220

Pro Pro Gly Phe Lys Ser Glu Phe Thr Gly Pro Gln Asn Thr Gly His
225                 230                 235                     240

Gly Ala Thr Ser Gly Phe Gly Ser Ala Phe Thr Gly Gln Gln Gly Tyr
                245                     250                 255

Glu Asn Ser Gly Pro Gly Phe Trp Thr Gly Leu Gly Thr Gly Gly Ile
            260                 265                 270

Leu Gly Tyr Leu Phe Gly Ser Asn Arg Ala Ala Thr Pro Phe Ser Asp
        275                 280                 285

Ser Trp Tyr Tyr Pro Ser Tyr Pro Pro Ser Tyr Pro Gly Thr Trp Asn
    290                 295                 300

Arg Ala Tyr Ser Pro Leu His Gly Gly Ser Gly Ser Tyr Ser Val Cys
305                 310                 315                     320

Ser Asn Ser Asp Thr Lys Thr Arg Thr Ala Ser Gly Tyr Gly Gly Thr
                325                 330                 335

Arg Arg Arg
```

<210> 67
<211> 27
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (27)
<223> Xaa equals stop translation

<400> 67

```
Met His Ala Leu Ile Leu Gln Phe Ile Phe Ser Leu Cys Met Tyr Ile
 1               5                   10                      15


Ser Leu Phe Ser Ala Ala Arg Phe Leu Phe Xaa
            20                  25
```

<210> 68
<211> 76
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (65)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 68
Met Ser Gln Ser Val Ser Ser Ser Phe Leu Ile Leu Thr Leu Leu Leu
1   5   10   15

Ser Val Gly Phe Gln Cys Leu Thr Leu Tyr Thr Thr Val Thr Thr Thr
            20   25   30

Cys Leu Trp Gly Pro Pro Arg Ala Ala Gly Arg Leu Phe Val Gln Ser
            35   40   45

Leu Pro Ser Cys Glu Cys Cys Cys Arg Ala Arg Arg Gly Ala Val Xaa
        50   55   60

Xaa Ser Pro Pro Trp Arg Pro Trp Pro Glu Gln Val
65   70   75

<210> 69
<211> 216
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (216)
<223> Xaa equals stop translation

<400> 69
Met Tyr Leu Ser Ile Ile Phe Leu Ala Phe Val Ser Ile Asp Arg Cys
1   5   10   15

Leu Gln Leu Thr His Ser Cys Lys Ile Tyr Arg Ile Gln Glu Pro Gly
            20   25   30

Phe Ala Lys Met Ile Ser Thr Val Val Trp Leu Met Val Leu Leu Ile
            35   40   45

Met Val Pro Asn Met Met Ile Pro Ile Lys Asp Ile Lys Glu Lys Ser
        50   55   60

Asn Val Gly Cys Met Glu Phe Lys Lys Glu Phe Gly Arg Asn Trp His

```
              65                    70                    75                    80

     Leu Leu Thr Asn Phe Ile Cys Val Ala Ile Phe Leu Asn Phe Ser Ala
                         85                    90                    95

     Ile Ile Leu Ile Ser Asn Cys Leu Val Ile Arg Gln Leu Tyr Arg Asn
                        100                   105                   110

     Lys Asp Asn Glu Asn Tyr Pro Asn Val Lys Lys Ala Leu Ile Asn Ile
                        115                   120                   125

     Leu Leu Val Thr Thr Gly Tyr Ile Ile Cys Phe Val Pro Tyr His Ile
                        130                   135                   140

     Val Arg Ile Pro Tyr Thr Leu Ser Gln Thr Glu Val Ile Thr Asp Cys
     145                   150                   155                   160

     Ser Thr Arg Ile Ser Leu Phe Lys Ala Lys Glu Ala Thr Leu Leu Leu
                        165                   170                   175

     Ala Val Ser Asn Leu Cys Phe Asp Pro Ile Leu Tyr Tyr His Leu Ser
                        180                   185                   190

     Lys Ala Phe Arg Ser Lys Val Thr Glu Thr Phe Ala Ser Pro Lys Glu
                        195                   200                   205

     Thr Lys Val Arg Lys Lys Asn Xaa
         210                   215


<210> 70
<211> 407
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (407)
<223> Xaa equals stop translation

<400> 70
     Met His Pro Ala Val Phe Leu Ser Leu Pro Asp Leu Arg Cys Ser Leu
     1                   5                    10                   15

     Leu Leu Leu Val Thr Trp Val Phe Thr Pro Val Thr Thr Glu Ile Thr
                         20                   25                   30

     Ser Leu Asp Thr Glu Asn Ile Asp Glu Ile Leu Asn Asn Ala Asp Val
                         35                   40                   45

     Ala Leu Val Asn Phe Tyr Ala Asp Trp Cys Arg Phe Ser Gln Met Leu
         50                   55                   60

     His Pro Ile Phe Glu Glu Ala Ser Asp Val Ile Lys Glu Glu Phe Pro
     65                   70                   75                   80

     Asn Glu Asn Gln Val Val Phe Ala Arg Val Asp Cys Asp Gln His Ser
                         85                   90                   95
```

Asp Ile Ala Gln Arg Tyr Arg Ile Ser Lys Tyr Pro Thr Leu Lys Leu
            100   105   110

Phe Arg Asn Gly Met Met Met Lys Arg Glu Tyr Arg Gly Gln Arg Ser
            115   120   125

Val Lys Ala Leu Ala Asp Tyr Ile Arg Gln Gln Lys Ser Asp Pro Ile
        130   135   140

Gln Glu Ile Arg Asp Leu Ala Glu Ile Thr Thr Leu Asp Arg Ser Lys
145   150   155   160

Arg Asn Ile Ile Gly Tyr Phe Glu Gln Lys Asp Ser Asp Asn Tyr Arg
            165   170   175

Val Phe Glu Arg Val Ala Asn Ile Leu His Asp Asp Cys Ala Phe Leu
            180   185   190

Ser Ala Phe Gly Asp Val Ser Lys Pro Glu Arg Tyr Ser Gly Asp Asn
        195   200   205

Ile Ile Tyr Lys Pro Pro Gly His Ser Ala Pro Asp Met Val Tyr Leu
    210   215   220

Gly Ala Met Thr Asn Phe Asp Val Thr Tyr Asn Trp Ile Gln Asp Lys
225   230   235   240

Cys Val Pro Leu Val Arg Glu Ile Thr Phe Glu Asn Gly Glu Glu Leu
            245   250   255

Thr Glu Glu Gly Leu Pro Phe Leu Ile Leu Phe His Met Lys Glu Asp
        260   265   270

Thr Glu Ser Leu Glu Ile Phe Gln Asn Glu Val Ala Arg Gln Leu Ile
    275   280   285

Ser Glu Lys Gly Thr Ile Asn Phe Leu His Ala Asp Cys Asp Lys Phe
290   295   300

Arg His Pro Leu Leu His Ile Gln Lys Thr Pro Ala Asp Cys Pro Val
305   310   315   320

Ile Ala Ile Asp Ser Phe Arg His Met Tyr Val Phe Gly Asp Phe Lys
            325   330   335

Asp Val Leu Ile Pro Gly Lys Leu Lys Gln Phe Val Phe Asp Leu His
            340   345   350

Ser Gly Lys Leu His Arg Glu Phe His His Gly Pro Asp Pro Thr Asp
        355   360   365

Thr Ala Pro Gly Glu Gln Ala Gln Asp Val Ala Ser Ser Pro Pro Glu
    370   375   380

Ser Ser Phe Gln Lys Leu Ala Pro Ser Glu Tyr Arg Tyr Thr Leu Leu
385   390   395   400

Arg Asp Arg Asp Glu Leu Xaa
                405

<210> 71
<211> 45
<212> PRT
<213> Homo sapiens

<400> 71
Met Ser Met Cys Ile His Ala Lys Lys His Leu Ile Cys Ile Cys Phe
  1   5   10   15

Arg Lys Gly Gly Asn Glu Ala Thr Cys Leu Lys Ile Leu Leu Tyr Lys
              20   25   30

Ala Phe Gln Pro Phe Pro Leu Ser Phe Ala Leu Ile Phe
          35   40   45

<210> 72
<211> 34
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (34)
<223> Xaa equals stop translation

<400> 72
Met Pro Leu Lys Ala Val Thr Trp Pro Thr Leu Asn Ser Lys Leu Val
  1   5   10   15

Ala Ala Val Val Asn Leu Lys Ala Ser Gln Met Pro Ala Ser Ser Arg
              20   25   30

Val Xaa

<210> 73
<211> 160
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 73
Met Ala Pro Leu Ile Pro Ala Val Ala Arg Gly Ser Ser Phe Leu Leu
  1   5   10   15

Leu His Ala Leu Thr Leu Trp Gly Ala Pro Phe Pro Thr Thr Trp Val
              20   25   30

```
Ser Cys Gln Pro Arg Ser Val Leu Arg Pro Ser Pro Val Arg Pro Gly
        35              40              45

Val Pro Pro Leu Ala Ala Xaa Pro Leu Cys Ser Cys Val Ser Leu Phe
        50              55              60

Phe Phe Arg Val Val Leu His Val Ser Ser Ile Cys Gly Val Ala Leu
 65              70              75              80

Gly Pro Phe Arg Thr Gly Ala Pro Ala Gln Leu Leu Gly Pro Pro Pro
                85              90              95

Val Ala Gln Gly Arg Leu Phe Val Pro Gln Pro Gln Ala Val Ser Gly
            100             105             110

Glu Asn Arg Cys Val Val Pro Glu Leu Lys Phe Trp Glu Gly Gln Cys
        115             120             125

Pro Phe Leu Trp Gly Pro Gly Leu Val Leu His Cys Phe Lys Arg Ser
    130             135             140

Cys His Ser Asn Arg Gln Pro Cys Asn Arg Arg Ala Ala Cys Ser Pro
145             150             155             160
```

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<210> 74
<211> 26
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (26)
<223> Xaa equals stop translation

<400> 74
Met Ala Gly Ile His Arg Ala Phe Leu Val Phe Cys Leu Trp Gly Leu
 1               5               10              15

Xaa Leu Cys Val Val Gly Gly Pro Trp Xaa
            20              25
```

```
<210> 75
<211> 91
<212> PRT
<213> Homo sapiens

<400> 75
Met Ala Ala Ala Glu Glu Glu Asp Gly Gly Pro Glu Ala Lys Ile Ala
```

```
         1            5               10              15

       Ser Gly Ala Gly Arg Ala Arg Pro Ser Asn Val Ile Tyr Val Trp Arg
                    20              25              30

       Leu Leu Gly Lys Leu Trp Ser Val Cys Val Ala Thr Cys Thr Val Gly
                    35              40              45

       His Val Phe Ile Ser Gly Trp Arg His Gly Gln Asn Gly Lys Ser Val
              50              55              60

       Gln Tyr Val Lys Leu Gly Ser Ala Glu Arg Arg Leu Ser Arg Phe Met
        65              70              75              80

       Gly Glu Gly Ala Arg Ser Pro Arg Ile Pro Asp
                    85              90
```

```
<210> 76
<211> 33
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (33)
<223> Xaa equals stop translation

<400> 76
Met Thr Ile Trp Gln Leu Phe Ala Val Leu Ile Val Leu Phe Ala Lys
 1           5               10              15

Ser Arg Glu Ile Ser Thr Glu Gly Glu Pro Cys Val Leu Ser Lys Asn
            20              25              30

Xaa
```

```
<210> 77
<211> 23
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (23)
<223> Xaa equals stop translation

<400> 77
Met Leu Asn Pro Phe Xaa Gln Leu Leu Leu Val Leu Leu Phe Pro Glu
 1           5               10              15
```

Trp Pro Thr Pro Leu His Xaa
                    20

<210> 78
<211> 173
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (102)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 78
Met Lys Thr Leu Phe Leu Gly Val Thr Leu Gly Leu Ala Ala Ala Leu
 1   5   10   15

Ser Xaa Thr Leu Xaa Glu Glu Asp Ile Thr Gly Thr Trp Tyr Val Lys
            20   25   30

Ala Met Val Val Asp Lys Thr Phe Arg Arg Gln Glu Ala Gln Lys Val
        35   40   45

Ser Pro Val Lys Val Thr Ala Leu Gly Gly Gly Lys Leu Glu Ala Thr
    50   55   60

Phe Thr Phe Met Arg Glu Asp Arg Cys Ile Gln Lys Lys Ile Leu Xaa
65   70   75   80

Arg Lys Thr Glu Glu Pro Gly Lys Tyr Ser Ala Cys Glu Pro Leu Pro
                85   90   95

His Ser His Pro His Xaa Pro Pro Pro Pro Thr Pro Val His Gln Pro
                100   105   110

Pro Gln Val Glu Ser Ala Gln Ala Ala Leu Leu Pro Gly Pro Gln Leu
            115   120   125

Cys Pro Pro Pro Arg Arg Gly Trp Pro Leu Leu Pro Gly Gly Leu Val
    130   135   140

Ala Leu Thr Ser Asp Thr Gly Cys Asp Arg Leu Val Arg Ser Arg Asp

```
       145                 150                 155                 160

       Gly Pro Asp His Ala Cys Pro Leu Gly Gly Pro Ser His
                       165                 170
```

```
<210> 79
<211> 208
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (148)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (186)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (208)
<223> Xaa equals stop translation

<400> 79
Met Ala Asp Ser Ser Tyr Thr Ser Glu Val Gln Ala Ile Leu Ala Phe
  1               5                  10                  15

Leu Ser Leu Gln Arg Thr Gly Ser Gly Gly Pro Gly Asn His Pro His
             20                  25                  30

Gly Pro Asp Ala Ser Ala Glu Gly Leu Asn Pro Tyr Gly Leu Val Ala
         35                  40                  45

Pro Arg Phe Gln Arg Lys Phe Lys Ala Lys Gln Leu Thr Pro Arg Ile
     50                  55                  60

Leu Glu Ala His Gln Asn Val Ala Gln Leu Ser Leu Ala Glu Ala Gln
 65                  70                  75                  80

Leu Arg Phe Ile Gln Ala Trp Gln Ser Leu Pro Asp Phe Gly Ile Ser
             85                  90                  95

Tyr Val Met Val Arg Phe Lys Gly Ser Arg Lys Asp Glu Ile Leu Gly
            100                 105                 110

Ile Ala Asn Asn Arg Leu Ile Arg Ile Asp Leu Ala Val Gly Asp Val
        115                 120                 125

Val Lys Thr Trp Arg Phe Ser Asn Met Arg Gln Trp Asn Val Asn Trp
    130                 135                 140

Asp Ile Arg Xaa Val Ala Ile Glu Phe Asp Glu His Ile Asn Val Ala
145                 150                 155                 160

Phe Ser Cys Val Ser Ala Ser Cys Arg Ile Val His Glu Tyr Ile Gly
```

```
                    165                    170                    175

Gly Tyr Ile Phe Leu Ser Thr Arg Glu Xaa Ala Arg Gly Glu Glu Leu
            180                    185                    190

Asp Glu Asp Leu Phe Leu Gln Leu Thr Gly Gly His Glu Ala Phe Xaa
            195                    200                    205
```

<210> 80
<211> 146
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (95)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (100)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (146)
<223> Xaa equals stop translation

<400> 80

```
Met Pro Ser Gly Phe Gln Thr Cys Leu Leu Phe Thr Leu Ser Pro Phe
 1               5                  10                  15

Ser Leu Ser Lys Ile Val Gly Val Pro Ser Gln Gln Leu Pro Gly Gln
            20                  25                  30

Leu Ser Glu Gln Gly Gly Leu Cys Gly His Glu Gly Glu Pro Ala Arg
            35                  40                  45

Thr Val Pro Glu Thr Gln Leu Pro Leu Pro Phe Asn Ser Ala Gly Pro
    50                  55                  60

Pro His Leu Lys Cys Thr Gly Ala Gly Lys Arg Val Trp Ser Pro Pro
 65              70                  75                  80

Arg Arg Ala Ala Gln Glu Val Ser Leu Gln Leu Val Ser Cys Xaa Pro
            85                  90                  95

Cys Arg Gln Xaa Thr Ser Arg Ala Phe Ser Leu Ala Thr Asp Arg Thr
            100                 105                 110

Ala Ser Ala Arg Val Cys Cys Arg Phe Pro Phe Lys His Thr His Ser
            115                 120                 125

Pro His Pro Arg Arg Pro Glu Val Gln Gly Ala Trp Ala Val Val Pro
```

130   135   140

Leu Xaa
145

<210> 81
<211> 23
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (23)
<223> Xaa equals stop translation

<400> 81
Met Ala Ala Ala Cys Gly Pro Gly Ala Ala Gly Thr Ala Cys Ser Ser
1   5   10   15

Ala Cys Ile Cys Phe Cys Xaa
            20

<210> 82
<211> 31
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (31)
<223> Xaa equals stop translation

<400> 82
Met Lys Thr Leu Phe Leu Gly Val Thr Leu Gly Leu Ala Leu Pro Cys
1   5   10   15

Pro Ser Pro Trp Xaa Arg Arg Ile Ser Gln Gly Pro Gly Thr Xaa
            20   25   30

<210> 83
<211> 374
<212> PRT
<213> Homo sapiens

<400> 83
Met Ser Val Pro Ala Phe Ile Asp Ile Ser Glu Glu Asp Gln Ala Ala
1   5   10   15

Glu Leu Arg Ala Tyr Leu Lys Ser Lys Gly Ala Glu Ile Ser Glu Glu
            20   25   30

Asn Ser Glu Gly Gly Leu His Val Asp Leu Ala Gln Ile Ile Glu Ala
        35   40   45

Cys Asp Val Cys Leu Lys Glu Asp Asp Lys Asp Val Glu Ser Val Met
    50   55   60

Asn Ser Val Val Ser Leu Leu Leu Ile Leu Glu Pro Asp Lys Gln Glu
65   70   75   80

Ala Leu Ile Glu Ser Leu Cys Glu Lys Leu Val Lys Phe Arg Glu Gly
                85   90   95

Glu Arg Pro Ser Leu Arg Leu Gln Leu Leu Ser Asn Leu Phe His Gly
            100   105   110

Met Asp Lys Asn Thr Pro Val Arg Tyr Thr Val Tyr Cys Ser Leu Ile
        115   120   125

Lys Val Ala Ala Ser Cys Gly Ala Ile Gln Tyr Ile Pro Thr Glu Leu
    130   135   140

Asp Gln Val Arg Lys Trp Ile Ser Asp Trp Asn Leu Thr Thr Glu Lys
145   150   155   160

Lys His Thr Leu Leu Arg Leu Leu Tyr Glu Ala Leu Val Asp Cys Lys
            165   170   175

Lys Ser Asp Ala Ala Ser Lys Val Met Val Glu Leu Leu Gly Ser Tyr
        180   185   190

Thr Glu Asp Asn Ala Ser Gln Ala Arg Val Asp Ala His Arg Cys Ile
        195   200   205

Val Arg Ala Leu Lys Asp Pro Asn Ala Phe Leu Phe Asp His Leu Leu
    210   215   220

Thr Leu Lys Pro Val Lys Phe Leu Glu Gly Glu Leu Ile His Asp Leu
225   230   235   240

Leu Thr Ile Phe Val Ser Ala Lys Leu Ala Ser Tyr Val Lys Phe Tyr
            245   250   255

Gln Asn Asn Lys Asp Phe Ile Asp Ser Leu Gly Leu Leu His Glu Gln
        260   265   270

Asn Met Ala Lys Met Arg Leu Leu Thr Phe Met Gly Met Ala Val Glu
        275   280   285

Asn Lys Glu Ile Ser Phe Asp Thr Met Gln Gln Glu Leu Gln Ile Gly
    290   295   300

Ala Asp Asp Val Glu Ala Phe Val Ile Asp Ala Val Arg Thr Lys Met
305   310   315   320

Val Tyr Cys Lys Ile Asp Gln Thr Gln Arg Lys Val Val Val Ser His
            325   330   335

Ser Thr His Arg Thr Phe Gly Lys Gln Gln Trp Gln Gln Leu Tyr Asp
            340   345   350

Thr Leu Asn Ala Trp Lys Gln Asn Leu Asn Lys Val Lys Asn Ser Leu
        355   360   365

Leu Ser Leu Ser Asp Thr
    370

<210> 84
<211> 13
<212> PRT
<213> Homo sapiens

<400> 84
Met Ser Val Pro Ala Phe Ile Asp Ile Ser Glu Glu Asp
  1   5   10

<210> 85
<211> 15
<212> PRT
<213> Homo sapiens

<400> 85
Gln Ala Ala Glu Leu Arg Ala Tyr Leu Lys Ser Lys Gly Ala Glu
  1   5   10   15

<210> 86
<211> 17
<212> PRT
<213> Homo sapiens

<400> 86
Ile Ser Glu Glu Asn Ser Glu Gly Gly Leu His Val Asp Leu Ala Gln
  1   5   10   15

Ile

<210> 87
<211> 18
<212> PRT
<213> Homo sapiens

<400> 87
Ile Glu Ala Cys Asp Val Cys Leu Lys Glu Asp Asp Lys Asp Val Glu
  1   5   10   15

Ser Val

<210> 88
<211> 16

<212> PRT
<213> Homo sapiens

<400> 88
Val Ala Arg Pro Ser Ser Leu Phe Arg Ser Ala Trp Ser Cys Glu Trp
1   5   10   15

<210> 89
<211> 12
<212> PRT
<213> Homo sapiens

<400> 89
Leu Arg Leu Gln Leu Leu Ser Asn Leu Phe His Gly
1   5   10

<210> 90
<211> 17
<212> PRT
<213> Homo sapiens

<400> 90
Lys Asp Val Glu Ser Val Met Asn Ser Val Val Ser Leu Leu Leu Ile
1   5   10   15

Leu

<210> 91
<211> 26
<212> PRT
<213> Homo sapiens

<400> 91
Asp Ala Ala Ser Lys Val Met Val Glu Leu Leu Gly Ser Tyr Thr Glu
1   5   10   15

Asp Asn Ala Ser Gln Ala Arg Val Asp Ala
                20   25

<210> 92
<211> 10
<212> PRT
<213> Homo sapiens

<400> 92
Val Glu Ala Phe Val Ile Asp Ala Val Arg
1   5   10

<210> 93

<211> 18
<212> PRT
<213> Homo sapiens

<400> 93
Lys Met Arg Leu Leu Thr Phe Met Gly Met Ala Val Glu Asn Lys Glu
 1   5   10   15

Ile Ser

<210> 94
<211> 196
<212> PRT
<213> Homo sapiens

<400> 94
Met Glu Ala Val Pro Glu Gly Asp Trp Phe Cys Thr Val Cys Leu Ala
 1   5   10   15

Gln Gln Val Glu Gly Glu Phe Thr Gln Lys Pro Gly Phe Pro Lys Arg
                20   25   30

Gly Gln Lys Arg Lys Ser Gly Tyr Ser Leu Asn Phe Ser Glu Gly Asp
            35   40   45

Gly Arg Arg Arg Arg Val Leu Leu Arg Gly Arg Glu Ser Pro Ala Ala
        50   55   60

Gly Pro Arg Tyr Ser Glu Glu Gly Leu Ser Pro Ser Lys Arg Arg Arg
 65   70   75   80

Leu Ser Met Arg Asn His His Ser Asp Leu Thr Phe Cys Glu Ile Ile
                85   90   95

Leu Met Glu Met Glu Ser His Asp Ala Ala Trp Pro Phe Leu Glu Pro
                100   105   110

Val Asn Pro Arg Leu Val Ser Gly Tyr Arg Arg Ile Ile Lys Asn Pro
            115   120   125

Met Asp Phe Ser Thr Met Arg Glu Arg Leu Leu Arg Gly Gly Tyr Thr
    130   135   140

Ser Ser Glu Glu Phe Ala Ala Asp Ala Leu Leu Val Phe Asp Asn Cys
145   150   155   160

Gln Thr Phe Asn Glu Asp Asp Ser Glu Val Gly Lys Ala Gly His Ile
                165   170   175

Met Arg Arg Phe Phe Glu Ser Arg Trp Glu Glu Phe Tyr Gln Gly Lys
            180   185   190

Gln Ala Asn Leu
            195

<210> 95
<211> 20
<212> PRT
<213> Homo sapiens

<400> 95
Met Glu Ala Val Pro Glu Gly Asp Trp Phe Cys Thr Val Cys Leu Ala
1   5   10   15

Gln Gln Val Glu
            20

<210> 96
<211> 21
<212> PRT
<213> Homo sapiens

<400> 96
Gly Glu Phe Thr Gln Lys Pro Gly Phe Pro Lys Arg Gly Gln Lys Arg
1   5   10   15

Lys Ser Gly Tyr Ser
            20

<210> 97
<211> 21
<212> PRT
<213> Homo sapiens

<400> 97
Leu Asn Phe Ser Glu Gly Asp Gly Arg Arg Arg Arg Val Leu Leu Arg
1   5   10   15

Gly Arg Glu Ser Pro
            20

<210> 98
<211> 20
<212> PRT
<213> Homo sapiens

<400> 98
Ala Ala Gly Pro Arg Tyr Ser Glu Glu Gly Leu Ser Pro Ser Lys Arg
1   5   10   15

Arg Arg Leu Ser
            20

<210> 99
<211> 21
<212> PRT
<213> Homo sapiens

<400> 99

Met Arg Asn His His Ser Asp Leu Thr Phe Cys Glu Ile Ile Leu Met
1   5   10   15

Glu Met Glu Ser His
            20

<210> 100
<211> 20
<212> PRT
<213> Homo sapiens

<400> 100
Asp Ala Ala Trp Pro Phe Leu Glu Pro Val Asn Pro Arg Leu Val Ser
1   5   10   15

Gly Tyr Arg Arg
            20

<210> 101
<211> 21
<212> PRT
<213> Homo sapiens

<400> 101
Ile Ile Lys Asn Pro Met Asp Phe Ser Thr Met Arg Glu Arg Leu Leu
1   5   10   15

Arg Gly Gly Tyr Thr
            20

<210> 102
<211> 21
<212> PRT
<213> Homo sapiens

<400> 102
Ser Ser Glu Glu Phe Ala Ala Asp Ala Leu Leu Val Phe Asp Asn Cys
1   5   10   15

Gln Thr Phe Asn Glu
            20

<210> 103
<211> 17
<212> PRT
<213> Homo sapiens

<400> 103
Asp Asp Ser Glu Val Gly Lys Ala Gly His Ile Met Arg Arg Phe Phe
1   5   10   15

Glu

<210> 104
<211> 14
<212> PRT
<213> Homo sapiens

<400> 104
Ser Arg Trp Glu Glu Phe Tyr Gln Gly Lys Gln Ala Asn Leu
1   5   10

<210> 105
<211> 35
<212> PRT
<213> Homo sapiens

<400> 105
Met Ser Glu Ile Tyr Leu Arg Cys Gln Asp Glu Gln Gln Tyr Ala Arg
1   5   10   15

Trp Met Ala Gly Cys Arg Leu Ala Ser Lys Gly Arg Thr Met Ala Asp
            20   25   30

Ser Ser Tyr
        35

<210> 106
<211> 45
<212> PRT
<213> Homo sapiens

<400> 106
Leu Val Ala Pro Arg Phe Gln Arg Lys Phe Lys Ala Lys Gln Leu Thr
1   5   10   15

Pro Arg Ile Leu Glu Ala His Gln Asn Val Ala Gln Leu Ser Leu Ala
            20   25   30

Glu Ala Gln Leu Arg Phe Ile Gln Ala Trp Gln Ser Leu
            35   40   45

<210> 107
<211> 23
<212> PRT
<213> Homo sapiens

<400> 107
Val Gly Asp Val Val Lys Thr Trp Arg Phe Ser Asn Met Arg Gln Trp
1   5   10   15

Asn Val Asn Trp Asp Ile Arg
            20

<210> 108
<211> 26

<212> PRT
<213> Homo sapiens

<400> 108
Glu Glu Ile Asp Cys Thr Glu Glu Glu Met Met Val Phe Ala Ala Leu
1   5   10   15

Gln Tyr His Ile Asn Lys Leu Ser Gln Ser
            20   25

<210> 109
<211> 26
<212> PRT
<213> Homo sapiens

<400> 109
Glu Glu Ile Asp Cys Thr Glu Glu Glu Met Met Val Phe Ala Ala Leu
1   5   10   15

Gln Tyr His Ile Asn Lys Leu Ser Gln Ser
            20   25

<210> 110
<211> 26
<212> PRT
<213> Homo sapiens

<400> 110
Lys Glu Leu Ser Phe Ala Arg Ile Lys Ala Val Glu Cys Val Glu Ser
1   5   10   15

Thr Gly Arg His Ile Tyr Phe Thr Leu Val
            20   25

<210> 111
<211> 17
<212> PRT
<213> Homo sapiens

<400> 111
Gly Trp Asn Ala Gln Ile Thr Leu Gly Leu Val Lys Phe Lys Asn Gln
1   5   10   15

Gln

<210> 112
<211> 217
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (82)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (83)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (194)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 112
```
Met Val Thr Thr Ile Val Leu Gly Arg Arg Phe Ile Gly Ser Ile Val
1               5               10              15

Lys Glu Ala Ser Gln Arg Gly Lys Val Ser Leu Phe Arg Ser Ile Leu
            20              25              30

Leu Phe Leu Thr Arg Phe Thr Val Leu Thr Ala Thr Gly Trp Ser Leu
            35              40              45

Cys Arg Ser Leu Ile His Leu Phe Arg Thr Tyr Ser Phe Leu Asn Leu
    50              55              60

Leu Phe Leu Cys Tyr Pro Phe Gly Met Tyr Ile Pro Phe Leu Gln Leu
65              70              75              80

Asn Xaa Xaa Leu Arg Lys Thr Ser Leu Phe Asn His Met Ala Ser Met
            85              90              95

Gly Pro Arg Glu Ala Val Ser Gly Leu Ala Lys Ser Arg Asp Tyr Leu
            100             105             110

Leu Thr Leu Arg Glu Thr Trp Lys Gln His Xaa Arg Gln Leu Tyr Gly
        115             120             125

Pro Asp Ala Met Pro Thr His Ala Cys Cys Leu Ser Pro Ser Leu Ile
    130             135             140

Arg Ser Glu Val Glu Phe Leu Lys Met Asp Phe Asn Trp Arg Met Lys
145             150             155             160

Glu Val Leu Val Ser Ser Met Leu Ser Ala Tyr Tyr Val Ala Phe Val
            165             170             175

Pro Val Trp Phe Val Lys Asn Thr His Tyr Tyr Asp Lys Arg Trp Ser
        180             185             190

Cys Xaa Thr Leu Pro Ala Gly Val His Gln His Leu Arg Asp Pro His
    195             200             205

Ala Ala Pro Ala Ala Cys Gln Leu Leu
```

<210> 113
<211> 26
<212> PRT
<213> Homo sapiens

<400> 113
Met Val Thr Thr Ile Val Leu Gly Arg Arg Phe Ile Gly Ser Ile Val
1   5   10   15

Lys Glu Ala Ser Gln Arg Gly Lys Val Ser
            20   25

<210> 114
<211> 23
<212> PRT
<213> Homo sapiens

<400> 114
Leu Phe Arg Ser Ile Leu Leu Phe Leu Thr Arg Phe Thr Val Leu Thr
1   5   10   15

Ala Thr Gly Trp Ser Leu Cys
            20

<210> 115
<211> 30
<212> PRT
<213> Homo sapiens

<400> 115
Arg Ser Leu Ile His Leu Phe Arg Thr Tyr Ser Phe Leu Asn Leu Leu
1   5   10   15

Phe Leu Cys Tyr Pro Phe Gly Met Tyr Ile Pro Phe Leu Gln
            20   25   30

<210> 116
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 116

```
Leu Asn Xaa Xaa Leu Arg Lys Thr Ser Leu Phe Asn His Met Ala Ser
1               5               10              15

Met Gly Pro Arg Glu Ala Val Ser Gly Leu Ala Lys Ser Arg
            20              25              30
```

<210> 117
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 117
```
Asp Tyr Leu Leu Thr Leu Arg Glu Thr Trp Lys Gln His Xaa Arg Gln
1               5               10              15

Leu Tyr Gly Pro Asp Ala Met Pro Thr His Ala Cys Cys Leu
            20              25              30
```

<210> 118
<211> 31
<212> PRT
<213> Homo sapiens

<400> 118
```
Ser Pro Ser Leu Ile Arg Ser Glu Val Glu Phe Leu Lys Met Asp Phe
1               5               10              15

Asn Trp Arg Met Lys Glu Val Leu Val Ser Ser Met Leu Ser Ala
            20              25              30
```

<210> 119
<211> 27
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 119
```
Tyr Tyr Val Ala Phe Val Pro Val Trp Phe Val Lys Asn Thr His Tyr
1               5               10              15

Tyr Asp Lys Arg Trp Ser Cys Xaa Thr Leu Pro
            20              25
```

<210> 120
<211> 20

<212> PRT
<213> Homo sapiens

<400> 120
Ala Gly Val His Gln His Leu Arg Asp Pro His Ala Ala Pro Ala Ala
1   5   10   15

Cys Gln Leu Leu
            20

<210> 121
<211> 16
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 121
Leu Val Leu Gly Leu Ser Xaa Leu Asn Asn Ser Tyr Asn Phe Ser Phe
1   5   10   15

<210> 122
<211> 17
<212> PRT
<213> Homo sapiens

<400> 122
His Val Val Ile Gly Ser Gln Ala Glu Glu Gly Gln Tyr Ser Leu Asn
1   5   10   15

Phe

<210> 123
<211> 19
<212> PRT
<213> Homo sapiens

<400> 123
His Asn Cys Asn Asn Ser Val Pro Gly Lys Glu His Pro Phe Asp Ile
1   5   10   15

Thr Val Met

<210> 124
<211> 17
<212> PRT

<213> Homo sapiens

<400> 124
Phe Ile Lys Tyr Val Leu Ser Asp Lys Glu Lys Lys Val Phe Gly Ile
1   5   10   15

Val

<210> 125
<211> 13
<212> PRT
<213> Homo sapiens

<400> 125
Ile Pro Met Gln Val Leu Ala Asn Val Ala Tyr Ile Ile
1   5   10

<210> 126
<211> 13
<212> PRT
<213> Homo sapiens

<400> 126
Ile Pro Met Gln Val Leu Ala Asn Val Ala Tyr Ile Ile
1   5   10

<210> 127
<211> 15
<212> PRT
<213> Homo sapiens

<400> 127
Asp Gly Lys Val Ala Val Asn Leu Ala Lys Leu Lys Leu Phe Arg
1   5   10   15

<210> 128
<211> 13
<212> PRT
<213> Homo sapiens

<400> 128
Ile Arg Glu Lys Asn Pro Asp Gly Phe Leu Ser Ala Ala
1   5   10

<210> 129
<211> 9
<212> PRT
<213> Homo sapiens

<400> 129
Met Met Phe Gly Gly Tyr Glu Thr Ile
1   5

<210> 130
<211> 24
<212> PRT
<213> Homo sapiens

<400> 130
Tyr Arg Asp Glu Ser Ser Ser Glu Leu Ser Val Asp Ser Glu Val Glu
1   5   10   15

Phe Gln Leu Tyr Ser Gln Ile His
                20

<210> 131
<211> 136
<212> PRT
<213> Homo sapiens

<400> 131
Tyr Ala Gln Asp Leu Asp Asp Val Ile Arg Glu Glu Glu His Glu Glu
1   5   10   15

Lys Asn Ser Gly Asn Ser Glu Ser Ser Ser Ser Lys Pro Asn Gln Lys
                20   25   30

Lys Leu Ile Val Leu Ser Asp Ser Glu Val Ile Gln Leu Ser Asp Gly
            35   40   45

Ser Glu Val Ile Thr Leu Ser Asp Glu Asp Ser Ile Tyr Arg Cys Lys
        50   55   60

Gly Lys Asn Val Arg Val Gln Ala Gln Glu Asn Ala His Gly Leu Ser
65   70   75   80

Ser Ser Leu Gln Ser Asn Glu Leu Val Asp Lys Lys Cys Lys Ser Asp
                85   90   95

Ile Glu Lys Pro Lys Ser Glu Glu Arg Ser Gly Val Ile Arg Glu Val
                100   105   110

Met Ile Ile Glu Val Ser Ser Ser Glu Glu Glu Glu Ser Thr Ile Ser
            115   120   125

Glu Gly Asp Asn Val Glu Ser Trp
    130   135

<210> 132
<211> 37
<212> PRT
<213> Homo sapiens

<400> 132
Met Leu Leu Gly Cys Glu Val Asp Asp Lys Asp Asp Asp Ile Leu Leu
1   5   10   15

Asn Leu Val Gly Cys Glu Asn Ser Val Thr Glu Gly Glu Asp Gly Ile
                20   25   30

Asn Trp Ser Ile Ser
            35

<210> 133
<211> 18
<212> PRT
<213> Homo sapiens

<400> 133
Asp Lys Asp Ile Glu Ala Gln Ile Ala Asn Asn Arg Thr Pro Gly Arg
 1   5   10   15

Trp Thr

<210> 134
<211> 31
<212> PRT
<213> Homo sapiens

<400> 134
Gln Arg Tyr Tyr Ser Ala Asn Lys Asn Ile Ile Cys Arg Asn Cys Asp
 1   5   10   15

Lys Arg Gly His Leu Ser Lys Asn Cys Pro Leu Pro Arg Lys Val
            20   25   30

<210> 135
<211> 179
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (120)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (139)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 135
Arg Arg Cys Phe Leu Cys Ser Arg Arg Gly His Leu Leu Tyr Ser Cys
 1   5   10   15

Pro Ala Pro Leu Cys Glu Tyr Cys Pro Val Pro Lys Met Leu Asp His
            20   25   30

Ser Cys Leu Phe Arg His Ser Trp Asp Lys Gln Cys Asp Arg Cys His
            35   40   45

```
Met Leu Gly His Tyr Thr Asp Ala Cys Thr Glu Ile Trp Arg Gln Tyr
    50              55              60

His Leu Thr Thr Lys Pro Gly Pro Pro Lys Lys Pro Lys Thr Pro Ser
65              70              75              80

Arg Pro Ser Ala Leu Ala Tyr Cys Tyr His Cys Ala Gln Lys Gly His
                85              90              95

Tyr Gly His Glu Cys Pro Glu Arg Glu Val Tyr Asp Pro Ser Pro Val
            100             105             110

Ser Pro Phe Ile Cys Tyr Tyr Xaa Asp Lys Tyr Glu Ile Gln Glu Arg
        115             120             125

Glu Lys Arg Leu Lys Gln Lys Ile Lys Val Xaa Lys Lys Asn Gly Val
    130             135             140

Ile Pro Glu Pro Ser Lys Leu Pro Tyr Ile Lys Ala Ala Asn Glu Asn
145             150             155             160

Pro His His Asp Ile Arg Lys Gly Arg Ala Ser Trp Lys Ser Asn Arg
            165             170             175

Trp Pro Gln
```

<210> 136
<211> 416
<212> PRT
<213> Homo sapiens

<400> 136
```
Met Ser Phe Pro Pro His Leu Asn Arg Pro Pro Met Gly Ile Pro Ala
1               5               10              15

Leu Pro Pro Gly Ile Pro Pro Pro Gln Phe Pro Gly Phe Pro Pro Pro
            20              25              30

Val Pro Pro Gly Thr Pro Met Ile Pro Val Pro Met Ser Ile Met Ala
        35              40              45

Pro Ala Pro Thr Val Leu Val Pro Thr Val Ser Met Val Gly Lys His
    50              55              60

Leu Gly Ala Arg Lys Asp His Pro Gly Leu Lys Ala Lys Glu Asn Asp
65              70              75              80

Glu Asn Cys Gly Pro Thr Thr Thr Val Phe Val Gly Asn Ile Ser Glu
            85              90              95

Lys Ala Ser Asp Met Leu Ile Arg Gln Leu Leu Ala Lys Cys Gly Leu
            100             105             110

Val Leu Ser Trp Lys Arg Val Gln Gly Ala Ser Gly Lys Leu Gln Ala
        115             120             125
```

Phe Gly Phe Cys Glu Tyr Lys Glu Pro Glu Ser Thr Leu Arg Ala Leu
    130   135   140

Arg Leu Leu His Asp Leu Gln Ile Gly Glu Lys Lys Leu Leu Val Lys
145   150   155   160

Val Asp Ala Lys Thr Lys Ala Gln Leu Asp Glu Trp Lys Ala Lys Lys
            165   170   175

Lys Ala Ser Asn Gly Asn Ala Arg Pro Glu Thr Val Thr Asn Asp Asp
            180   185   190

Glu Glu Ala Leu Asp Glu Glu Thr Lys Arg Arg Asp Gln Met Ile Lys
        195   200   205

Gly Ala Ile Glu Val Leu Ile Arg Glu Tyr Ser Ser Glu Leu Asn Ala
    210   215   220

Pro Ser Gln Glu Ser Asp Ser His Pro Arg Lys Lys Lys Glu Lys
225   230   235   240

Lys Glu Asp Ile Phe Arg Arg Phe Pro Val Ala Pro Leu Ile Pro Tyr
            245   250   255

Pro Leu Ile Thr Lys Glu Asp Ile Asn Ala Ile Glu Met Glu Glu Asp
            260   265   270

Lys Arg Asp Leu Ile Ser Arg Glu Ile Ser Lys Phe Arg Asp Thr His
        275   280   285

Lys Lys Leu Glu Glu Glu Lys Gly Lys Lys Glu Lys Glu Arg Gln Glu
    290   295   300

Ile Glu Lys Glu Arg Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg
305   310   315   320

Glu Arg Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu
            325   330   335

Lys Glu Lys Glu Arg Glu Arg Glu Arg Glu Arg Asp Arg Asp Arg Asp
            340   345   350

Arg Thr Lys Glu Arg Asp Arg Asp Arg Asp Arg Glu Arg Asp Arg Asp
        355   360   365

Arg Asp Arg Glu Arg Ser Ser Asp Arg Asn Lys Asp Arg Ile Arg Ser
    370   375   380

Arg Glu Lys Ser Arg Asp Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu
385   390   395   400

Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu
            405   410   415

<210> 137
<211> 43
<212> PRT
<213> Homo sapiens

<400> 137
Met Ser Phe Pro Pro His Leu Asn Arg Pro Pro Met Gly Ile Pro Ala
1   5   10   15

Leu Pro Pro Gly Ile Pro Pro Pro Gln Phe Pro Gly Phe Pro Pro Pro
                20   25   30

Val Pro Pro Gly Thr Pro Met Ile Pro Val Pro
            35   40

<210> 138
<211> 35
<212> PRT
<213> Homo sapiens

<400> 138
Met Ser Ile Met Ala Pro Ala Pro Thr Val Leu Val Pro Thr Val Ser
1   5   10   15

Met Val Gly Lys His Leu Gly Ala Arg Lys Asp His Pro Gly Leu Lys
                20   25   30

Ala Lys Glu
        35

<210> 139
<211> 41
<212> PRT
<213> Homo sapiens

<400> 139
Asn Asp Glu Asn Cys Gly Pro Thr Thr Thr Val Phe Val Gly Asn Ile
1   5   10   15

Ser Glu Lys Ala Ser Asp Met Leu Ile Arg Gln Leu Leu Ala Lys Cys
                20   25   30

Gly Leu Val Leu Ser Trp Lys Arg Val
            35   40

<210> 140
<211> 40
<212> PRT
<213> Homo sapiens

<400> 140
Gln Gly Ala Ser Gly Lys Leu Gln Ala Phe Gly Phe Cys Glu Tyr Lys
1   5   10   15

Glu Pro Glu Ser Thr Leu Arg Ala Leu Arg Leu Leu His Asp Leu Gln

```
                20                    25                    30
```

Ile Gly Glu Lys Lys Leu Leu Val
        35   40

<210> 141
<211> 39
<212> PRT
<213> Homo sapiens

<400> 141
Lys Val Asp Ala Lys Thr Lys Ala Gln Leu Asp Glu Trp Lys Ala Lys
 1   5   10   15

Lys Lys Ala Ser Asn Gly Asn Ala Arg Pro Glu Thr Val Thr Asn Asp
              20   25   30

Asp Glu Glu Ala Leu Asp Glu
              35

<210> 142
<211> 40
<212> PRT
<213> Homo sapiens

<400> 142
Glu Thr Lys Arg Arg Asp Gln Met Ile Lys Gly Ala Ile Glu Val Leu
 1   5   10   15

Ile Arg Glu Tyr Ser Ser Glu Leu Asn Ala Pro Ser Gln Glu Ser Asp
              20   25   30

Ser His Pro Arg Lys Lys Lys Lys
              35   40

<210> 143
<211> 44
<212> PRT
<213> Homo sapiens

<400> 143
Glu Lys Lys Glu Asp Ile Phe Arg Arg Phe Pro Val Ala Pro Leu Ile
 1   5   10   15

Pro Tyr Pro Leu Ile Thr Lys Glu Asp Ile Asn Ala Ile Glu Met Glu
              20   25   30

Glu Asp Lys Arg Asp Leu Ile Ser Arg Glu Ile Ser
              35   40

<210> 144
<211> 41
<212> PRT
<213> Homo sapiens

<400> 144

```
Lys Phe Arg Asp Thr His Lys Lys Leu Glu Glu Glu Lys Gly Lys Lys
1               5               10              15

Glu Lys Glu Arg Gln Glu Ile Glu Lys Glu Arg Arg Glu Arg Glu Arg
            20              25              30

Glu Arg Glu Arg Glu Arg Glu Arg Arg
        35              40
```

<210> 145
<211> 93
<212> PRT
<213> Homo sapiens

<400> 145

```
Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Lys Glu Lys
1               5               10              15

Glu Arg Glu Arg Glu Arg Glu Arg Asp Arg Asp Arg Asp Arg Thr Lys
            20              25              30

Glu Arg Asp Arg Asp Arg Asp Arg Glu Arg Asp Arg Asp Arg Asp Arg
        35              40              45

Glu Arg Ser Ser Asp Arg Asn Lys Asp Arg Ile Arg Ser Arg Glu Lys
    50              55              60

Ser Arg Asp Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg
65              70              75              80

Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu
            85              90
```

<210> 146
<211> 52
<212> PRT
<213> Homo sapiens

<400> 146

```
Arg Asp Arg Asp Arg Asp Arg Glu Arg Ser Ser Asp Arg Asn Lys Asp
1               5               10              15

Arg Ile Arg Ser Arg Glu Lys Ser Arg Asp Arg Glu Arg Glu Arg Glu
            20              25              30

Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu
        35              40              45

Arg Glu Arg Glu
    50
```

<210> 147
<211> 22

<212> PRT
<213> Homo sapiens

<400> 147
Lys Pro Gln Met Glu Gly Arg Leu Val Gly Gly Gly Gly Ser Phe Ser
1   5   10   15

Ser Arg Gly Arg His Pro
            20

<210> 148
<211> 25
<212> PRT
<213> Homo sapiens

<400> 148
Leu Leu Val Pro Ser Pro Ser Leu Leu Pro Ala Val Ser Ser Tyr His
1   5   10   15

Leu Pro Leu Gly Arg Gly Leu Ile Arg
            20   25

<210> 149
<211> 23
<212> PRT
<213> Homo sapiens

<400> 149
Glu Gln Gly Ser Ala Val Arg Ser Pro Ala Phe Pro Val Arg Gln Ala
1   5   10   15

Trp Leu Pro Cys Ser Gly Ser
            20

<210> 150
<211> 151
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 150
Met Gly Leu Asn Pro Pro Gly Leu Thr Ser Ala Leu Lys Pro Gln Met
1   5   10   15

Glu Gly Arg Leu Val Gly Gly Gly Gly Ser Phe Ser Ser Arg Gly Arg
            20   25   30

His Pro Ala Gly Trp Val Leu Pro Gln Pro Cys Leu Leu Leu Ser Pro
        35   40   45

Thr Leu Ser Phe Pro Pro Ala Cys Gly Leu Leu Val Pro Ser Pro Ser

```
            50                      55                      60
Leu Leu Pro Ala Val Ser Ser Tyr His Leu Pro Leu Gly Arg Gly Leu
65                      70                      75                      80

Ile Arg Pro Ala Phe Lys Ile Lys Val Cys Ser Lys Leu Thr Val Trp
                    85                      90                      95

Cys Ser Leu Pro Ser Pro Ser Arg Trp Arg Cys Cys His Gly Asn Ala
                100                     105                     110

Val Ala Leu Pro Ala Leu Gly Pro Trp Arg Xaa Trp Glu Gln Gly Ser
                115                     120                     125

Ala Val Arg Ser Pro Ala Phe Pro Val Arg Gln Ala Trp Leu Pro Cys
                130                     135                     140

Ser Gly Ser Leu Thr Ser Trp
145                     150
```

<210> 151
<211> 64
<212> PRT
<213> Homo sapiens

<400> 151
```
Asn Val Thr Lys Ile Thr Leu Glu Ser Phe Leu Ala Trp Lys Lys Arg
1                   5                   10                      15

Lys Arg Gln Glu Lys Ile Asp Lys Leu Glu Gln Asp Met Glu Arg Arg
                20                      25                      30

Lys Ala Asp Phe Lys Ala Gly Lys Ala Leu Val Ile Ser Gly Arg Glu
                35                      40                      45

Val Phe Glu Phe Arg Pro Glu Leu Val Asn Asp Asp Asp Glu Glu Ala
        50                      55                      60
```

<210> 152
<211> 22
<212> PRT
<213> Homo sapiens

<400> 152
```
Glu Arg Arg Lys Ala Asp Phe Lys Ala Gly Lys Ala Leu Val Ile Ser
1                   5                       10                      15

Gly Arg Glu Val Phe Glu
                20
```

<210> 153
<211> 89

```
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (81)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 153
Met Cys Asp Glu Leu Pro Gly Glu Gly Arg Trp Glu Pro Gly Gln Asp
1               5                   10                  15

Arg Lys Leu Cys Leu Ser Phe Pro Leu Gly Thr Pro Ala Arg Pro Ile
            20                  25                  30

Lys Ser Val Cys Pro Thr Leu Leu Ser Leu Val Phe Leu Ser Arg Gly
            35                  40                  45

Met Glu Gln Arg Val Arg Glu Ala Val Ala Val Ser Thr Ser Ala Pro
        50                  55                  60

Ala Pro Ser Ala Ser Glu Pro Phe Leu Ser Trp Gly Met Gly Leu Ala
65                  70                  75                  80

Xaa Phe Ser Phe Pro Phe Leu Tyr Leu
                    85


<210> 154
<211> 95
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (71)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 154
Gly Ala Ser Leu Gly Ser Ser Ser Ser Cys Pro Ser His Ser Trp Trp
1               5                   10                  15

Gly Gln Arg Ser Val Cys Arg Glu Thr Ala Ser Pro Leu Pro Arg Trp
            20                  25                  30

Met Leu Tyr Leu Asp Gly Leu Ala Thr Ser His Phe Leu His His Pro
            35                  40                  45

Glu Pro His Leu Leu Pro Ser Pro Gly Val Phe Thr Arg Leu Cys Cys
        50                  55                  60

His Leu Cys Pro Gly His Xaa Ser Leu Ser Gly Cys Val Met Asn Ser
65                  70                  75                  80

Gln Glu Arg Glu Asp Gly Ser Gln Gly Lys Ile Gly Ser Ser Ala
                85                  90                  95
```

```
<210> 155
<211> 125
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (115)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 155
Thr Ser Val Leu Ser Ser Ser Ser Val Tyr Cys Met Gln Ala Arg Lys
 1               5                  10                  15

Leu Ser Val Ser Gln Arg Tyr Arg Lys Gly Lys Glu Lys Xaa Ala Arg
             20                  25                  30

Pro Ile Pro Gln Glu Arg Lys Gly Ser Asp Ala Glu Gly Ala Gly Ala
         35                  40                  45

Glu Val Glu Thr Ala Thr Ala Ser Leu Thr Leu Cys Ser Ile Pro Leu
     50                  55                  60

Leu Lys Lys Thr Arg Leu Ser Arg Val Gly Gln Thr Leu Phe Ile Gly
 65                  70                  75                  80

Leu Ala Gly Val Pro Ser Gly Lys Leu Arg Gln Ser Phe Leu Ser Cys
                 85                  90                  95

Pro Gly Ser His Leu Pro Ser Pro Gly Ser Ser Ser His Ile Pro Arg
                100                 105                 110

Gly Lys Xaa Val Leu Gly Arg Gly Gly Ser Lys Ala Gly
         115                 120                 125


<210> 156
<211> 125
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (97)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 156
Ala Leu Val Lys Gly Thr Gly Arg Glu Lys Arg Arg Xaa Gln Gly Pro
```

```
          1                 5                      10                     15

      Ser Pro Lys Lys Gly Arg Ala Leu Met Gln Arg Glu Gln Glu Leu Arg
                       20                  25                  30

      Trp Arg Arg Pro Leu Pro Leu Ser Pro Ser Val Pro Ser Leu Cys Ser
                   35                  40                  45

      Arg Lys Pro Gly Leu Ala Glu Trp Asp Arg Arg Phe Leu Leu Val Trp
               50                  55                  60

      Leu Ala Cys Leu Val Glu Ser Ser Gly Arg Ala Ser Tyr Leu Ala Leu
        65                  70                  75                  80

      Ala Pro Ile Phe Pro Leu Leu Gly Val His His Thr Ser Arg Glu Gly
                       85                  90                  95

      Xaa Val Ser Trp Ala Glu Val Ala Ala Lys Pro Gly Lys Asn Ser Arg
                       100                 105                 110

      Ala Gly Lys Gln Met Gly Leu Arg Val Met Gln Lys Met
               115                 120                 125


      <210> 157
      <211> 32
      <212> PRT
      <213> Homo sapiens

      <400> 157
      Ser Phe Pro Leu Gly Thr Pro Ala Arg Pro Ile Lys Ser Val Cys Pro
        1                 5                  10                  15

      Thr Leu Leu Ser Leu Val Phe Leu Ser Arg Gly Met Glu Gln Arg Val
                       20                  25                  30


      <210> 158
      <211> 31
      <212> PRT
      <213> Homo sapiens

      <400> 158
      Thr Ala Ser Pro Leu Pro Arg Trp Met Leu Tyr Leu Asp Gly Leu Ala
        1                 5                  10                  15

      Thr Ser His Phe Leu His His Pro Glu Pro His Leu Leu Pro Ser
                       20                  25                  30


      <210> 159
      <211> 31
      <212> PRT
      <213> Homo sapiens
```

<400> 159
Arg Lys Gly Ser Asp Ala Glu Gly Ala Gly Ala Glu Val Glu Thr Ala
1   5   10   15

Thr Ala Ser Leu Thr Leu Cys Ser Ile Pro Leu Leu Lys Lys Thr
            20   25   30

<210> 160
<211> 25
<212> PRT
<213> Homo sapiens

<400> 160
Gln Arg Glu Gln Glu Leu Arg Trp Arg Arg Pro Leu Pro Leu Ser Pro
1   5   10   15

Ser Val Pro Ser Leu Cys Ser Arg Lys
            20   25

<210> 161
<211> 29
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 161
Pro Leu Leu Gly Val His His Thr Ser Arg Glu Gly Xaa Val Ser Trp
1   5   10   15

Ala Glu Val Ala Ala Lys Pro Gly Lys Asn Ser Arg Ala
            20   25

<210> 162
<211> 73
<212> PRT
<213> Homo sapiens

<400> 162
Met Ser Val Leu Lys Gly Glu Arg Gln Gln Thr Leu Ala Leu Ala Val
1   5   10   15

Leu Ser Val Ala Lys Glu Asn Ala Arg Asp Val Cys Cys Leu Gln Gly
            20   25   30

Trp Gln Asp Thr Ser Cys Arg Asp Thr Ser Cys Ala Ala Leu Arg Gly
        35   40   45

Gly Leu Gln Thr Leu Phe Pro Ala Pro Val His Phe Arg Cys Gly Gly
    50   55   60

Pro Ala Glu Leu Lys Gly Arg Gly Ser

65   70

<210> 163
<211> 68
<212> PRT
<213> Homo sapiens

<400> 163
Ala His Ser Phe Thr Thr Pro Glu Glu Ala Arg Gly Ala Gly Ser Met
1   5   10   15

Gly Cys Arg Phe Pro Phe Lys His Thr His Ser Pro His Pro Arg Arg
            20   25   30

Pro Glu Val Gln Gly Ala Trp Ala Gly Cys Thr Ser Ala Gly Glu Lys
        35   40   45

Ala Glu Pro Pro Pro Ser Arg Glu Pro Gly Ser Gln Ala Ser Arg Phe
    50   55   60

Pro Leu Pro Pro
65

<210> 164
<211> 25
<212> PRT
<213> Homo sapiens

<400> 164
Gly Trp Gln Asp Thr Ser Cys Arg Asp Thr Ser Cys Ala Ala Leu Arg
1   5   10   15

Gly Gly Leu Gln Thr Leu Phe Pro Ala
            20   25

<210> 165
<211> 24
<212> PRT
<213> Homo sapiens

<400> 165
Gly Cys Arg Phe Pro Phe Lys His Thr His Ser Pro His Pro Arg Arg
1   5   10   15

Pro Glu Val Gln Gly Ala Trp Ala
            20

<210> 166
<211> 81
<212> PRT
<213> Homo sapiens

<400> 166
Pro His Gln Val Glu Gly Arg Leu Gly Thr Met Glu Thr Trp Asp Ser

```
              1              5                  10                 15
           Ser His Glu Gly Leu Leu His Cys Arg Ile Pro Leu Lys Gly Ser Trp
                        20                  25                  30

           Val Gln Glu Pro Ser Cys Gln Tyr Gln Trp Arg Arg Thr Arg Cys Met
                        35                  40                  45

           Gly Ile Pro Pro Ala Thr Ser Gly Trp Pro Cys Arg Ala Pro Ala Phe
                        50                  55                  60

           Leu Cys Ala Arg Ala Glu Phe Pro Ala Ser Pro Gly Gly Ser Thr Asn
           65                  70                  75                  80

           Phe
```

```
<210> 167
<211> 81
<212> PRT
<213> Homo sapiens

<400> 167
Leu Val Thr Pro Pro Ser Gly Gly Glu Thr Gly Asp His Gly Asn Met
1              5                  10                  15

Gly Gln Leu Pro Arg Arg Ala Leu Ala Leu Gln Asn Ser Thr Gln Gly
                20                  25                  30

Ile Leu Gly Pro Gly Ala Glu Leu Pro Val Ser Val Glu Lys Asp Lys
                35                  40                  45

Val His Gly Asp Pro Ala Ser Asn Ile Arg Met Ala Met Pro Gly Thr
           50                  55                  60

Arg Phe Pro Leu Cys Ser Cys Arg Ile Pro Cys Gln Pro Gly Gly Ile
65                  70                  75                  80

His
```

```
<210> 168
<211> 32
<212> PRT
<213> Homo sapiens

<400> 168
Glu Gly Leu Leu His Cys Arg Ile Pro Leu Lys Gly Ser Trp Val Gln
1              5                  10                  15

Glu Pro Ser Cys Gln Tyr Gln Trp Arg Arg Thr Arg Cys Met Gly Ile
                20                  25                  30
```

<210> 169
<211> 29
<212> PRT
<213> Homo sapiens

<400> 169
Gln Asn Ser Thr Gln Gly Ile Leu Gly Pro Gly Ala Glu Leu Pro Val
1   5   10   15

Ser Val Glu Lys Asp Lys Val His Gly Asp Pro Ala Ser
                20   25

<210> 170
<211> 42
<212> PRT
<213> Homo sapiens

<400> 170
Phe Gly Thr Arg Lys Lys Tyr His Leu Cys Met Ile Pro Asn Leu Asp
1   5   10   15

Leu Asn Leu Asp Arg Asp Leu Val Leu Pro Asp Val Ser Tyr Gln Val
                20   25   30

Glu Ser Ser Glu Glu Asp Gln Ser Gln Thr
                35   40

<210> 171
<211> 115
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (88)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 171
Phe Leu Leu Ser Leu Gly Ser Leu Val Met Leu Leu Gln Asp Leu Val
1   5   10   15

His Ser Glu Leu Asp Gly Thr Leu His Tyr Thr Val Ala Leu His Lys
                20   25   30

Asp Gly Ile Glu Met Ser Cys Glu Gln Ser Ile Asp Ser Pro Asp Phe
                35   40   45

His Leu Leu Asp Trp Lys Cys Thr Val Glu Ile His Lys Glu Lys Lys
        50   55   60

Gln Gln Ser Leu Ser Leu Arg Ile His Ser Leu Arg Leu Ile Leu Leu
65   70   75   80

Thr Gly Phe His Leu Ile Thr Xaa Ile Trp Lys His Gln Ile Ser Ile
                85   90   95

Gln Ile Glu Ile Gln Ile Gly Tyr His Thr Gln Met Val Phe Phe Pro
100   105   110

Arg Ala Glu
115

<210> 172
<211> 26
<212> PRT
<213> Homo sapiens

<400> 172
Val His Ser Glu Leu Asp Gly Thr Leu His Tyr Thr Val Ala Leu His
1   5   10   15

Lys Asp Gly Ile Glu Met Ser Cys Glu Gln
            20   25

<210> 173
<211> 28
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 173
Gln Ser Leu Ser Leu Arg Ile His Ser Leu Arg Leu Ile Leu Leu Thr
1   5   10   15

Gly Phe His Leu Ile Thr Xaa Ile Trp Lys His Gln
            20   25

<210> 174
<211> 340
<212> PRT
<213> Homo sapiens

<400> 174
Met Ala Ala Ala Cys Gly Pro Gly Ala Ala Gly Thr Ala Cys Ser Ser
1   5   10   15

Ala Cys Ile Cys Phe Cys Asp Arg Gly Pro Cys Leu Gly Trp Asn Asp
                20   25   30

Pro Asp Arg Met Leu Leu Arg Asp Val Lys Ala Leu Thr Leu His Tyr
            35   40   45

Asp Arg Tyr Thr Thr Ser Arg Ser Trp Ile Pro Ser His Ser Pro Gln
        50   55   60

Leu Lys Cys Val Gly Gly Thr Ala Gly Cys Asp Ser Tyr Thr Pro Lys

```
            65                          70                          75                          80

Val Ile Gln Cys Gln Asn Lys Gly Trp Asp Gly Tyr Asp Val Gln Trp
                85                          90                          95

Glu Cys Lys Thr Asp Leu Asp Ile Ala Tyr Lys Phe Gly Lys Thr Val
                100                         105                         110

Val Ser Cys Glu Gly Tyr Glu Ser Ser Glu Asp Gln Tyr Val Leu Arg
                115                         120                         125

Gly Ser Cys Gly Leu Glu Tyr Asn Leu Asp Tyr Thr Glu Leu Gly Leu
        130                         135                         140

Gln Lys Leu Lys Glu Ser Gly Lys Gln His Gly Phe Ala Ser Phe Ser
145                         150                         155                         160

Asp Tyr Tyr Tyr Lys Trp Ser Ser Ala Asp Ser Cys Asn Met Ser Gly
                165                         170                         175

Leu Ile Thr Ile Val Val Leu Leu Gly Ile Ala Phe Val Val Tyr Lys
                180                         185                         190

Leu Phe Leu Ser Asp Gly Gln Tyr Ser Pro Pro Pro Tyr Ser Glu Tyr
        195                         200                         205

Pro Pro Phe Ser His Arg Tyr Gln Arg Phe Thr Asn Ser Ala Gly Pro
        210                         215                         220

Pro Pro Pro Gly Phe Lys Ser Glu Phe Thr Gly Pro Gln Asn Thr Gly
225                         230                         235                         240

His Gly Ala Thr Ser Gly Phe Gly Ser Ala Phe Thr Gly Gln Gln Gly
                245                         250                         255

Tyr Glu Asn Ser Gly Pro Gly Phe Trp Thr Gly Leu Gly Thr Gly Gly
                260                         265                         270

Ile Leu Gly Tyr Leu Phe Gly Ser Asn Arg Ala Ala Thr Pro Phe Ser
                275                         280                         285

Asp Ser Trp Tyr Tyr Pro Ser Tyr Pro Pro Ser Tyr Pro Gly Thr Trp
        290                         295                         300

Asn Arg Ala Tyr Ser Pro Leu His Gly Gly Ser Gly Ser Tyr Ser Val
305                         310                         315                         320

Cys Ser Asn Ser Asp Thr Lys Thr Arg Thr Ala Ser Gly Tyr Gly Gly
                325                         330                         335

Thr Arg Arg Arg
                340
```

<210> 175
<211> 24
<212> PRT
<213> Homo sapiens

<400> 175

```
Ala Cys Ser Ser Ala Cys Ile Cys Phe Cys Asp Arg Gly Pro Cys Leu
1               5                   10                  15

Gly Trp Asn Asp Pro Asp Arg Met
                20
```

<210> 176
<211> 26
<212> PRT
<213> Homo sapiens

<400> 176

```
Thr Ala Gly Cys Asp Ser Tyr Thr Pro Lys Val Ile Gln Cys Gln Asn
1               5                   10                  15

Lys Gly Trp Asp Gly Tyr Asp Val Gln Trp
                20                  25
```

<210> 177
<211> 32
<212> PRT
<213> Homo sapiens

<400> 177

```
Glu Tyr Asn Leu Asp Tyr Thr Glu Leu Gly Leu Gln Lys Leu Lys Glu
1               5                   10                  15

Ser Gly Lys Gln His Gly Phe Ala Ser Phe Ser Asp Tyr Tyr Tyr Lys
                20                  25                  30
```

<210> 178
<211> 28
<212> PRT
<213> Homo sapiens

<400> 178

```
Tyr Lys Leu Phe Leu Ser Asp Gly Gln Tyr Ser Pro Pro Pro Tyr Ser
1               5                   10                  15

Glu Tyr Pro Pro Phe Ser His Arg Tyr Gln Arg Phe
                20                  25
```

<210> 179
<211> 26
<212> PRT
<213> Homo sapiens

<400> 179

```
Glu Asn Ser Gly Pro Gly Phe Trp Thr Gly Leu Gly Thr Gly Gly Ile
```

```
                    5                    10                  15
        1
        Leu Gly Tyr Leu Phe Gly Ser Asn Arg Ala
                        20                  25
```

<210> 180
<211> 25
<212> PRT
<213> Homo sapiens

<400> 180
```
Asn Arg Ala Tyr Ser Pro Leu His Gly Gly Ser Gly Ser Tyr Ser Val
1                   5                   10                  15

Cys Ser Asn Ser Asp Thr Lys Thr Arg
                20                  25
```

<210> 181
<211> 124
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (32)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 181
```
Thr Glu Ser Gln Met Lys Cys Phe Leu Gly Asn Ser His Asp Thr Ala
1                   5                   10                  15

Pro Arg His Thr Cys Ser Gly Gln Gly Leu His Gly Gly Xaa Xaa Xaa
                20                  25                  30

Thr Ala Pro Leu Arg Ala Leu Gln Gln His Ser Gln Asp Gly Lys Leu
            35                  40                  45

Cys Thr Asn Ser Leu Pro Ala Ala Arg Gly Gly Pro His Lys His Val
        50                  55                  60

Val Val Thr Val Val Tyr Ser Val Lys His Trp Lys Pro Thr Glu Arg
65                  70                  75                  80

Ser Ser Val Ser Ile Lys Lys Glu Glu Glu Thr Asp Trp Asp Met Asp
                85                  90                  95
```

Gln Leu Ser Lys Gln Arg Thr Thr Tyr Glu Met Lys Ser Gly Ser Ser
            100   105   110

Gly Val Gln Thr Glu Glu Leu Arg His Pro Ser Leu
            115   120

<210> 182
<211> 77
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 182
Asn Ala Ser Trp Glu Ile His Met Thr Gln Arg His Val Ile Pro Xaa
 1   5   10   15

Leu Ala Arg Ala Ser Met Xaa Val Xaa Xaa Xaa Gln Arg Pro Ser Glu
            20   25   30

Leu Cys Ser Ser Ile Arg Arg Met Ala Asn Ser Ala Gln Ile Val Phe
            35   40   45

Pro Leu Pro Val Gly Ala Pro Thr Asn Thr Leu Ser Ser Leu Leu Tyr
    50   55   60

Thr Val Leu Asn Thr Gly Asn Gln Gln Lys Glu Ala Val
65   70   75

<210> 183
<211> 30
<212> PRT
<213> Homo sapiens

<400> 183
Ala Pro Leu Arg Ala Leu Gln Gln His Ser Gln Asp Gly Lys Leu Cys
1   5   10   15

Thr Asn Ser Leu Pro Ala Ala Arg Gly Gly Pro His Lys His
            20   25   30

<210> 184
<211> 27
<212> PRT
<213> Homo sapiens

<400> 184
Arg Ser Ser Val Ser Ile Lys Lys Glu Glu Glu Thr Asp Trp Asp Met
1   5   10   15

Asp Gln Leu Ser Lys Gln Arg Thr Thr Tyr Glu
            20   25

<210> 185
<211> 29
<212> PRT
<213> Homo sapiens

<400> 185
Leu Cys Ser Ser Ile Arg Arg Met Ala Asn Ser Ala Gln Ile Val Phe
1   5   10   15

Pro Leu Pro Val Gly Ala Pro Thr Asn Thr Leu Ser Ser
            20   25

<210> 186
<211> 17
<212> PRT
<213> Homo sapiens

<400> 186
Leu Ser Ile Ile Phe Leu Ala Phe Val Ser Ile Asp Arg Cys Leu Gln
1   5   10   15

Leu

<210> 187
<211> 67
<212> PRT
<213> Homo sapiens

<400> 187
Gly Ser Cys Phe Ala Thr Trp Ala Phe Ile Gln Lys Asn Thr Asn His
1   5   10   15

Arg Cys Val Ser Ile Tyr Leu Ile Asn Leu Leu Thr Ala Asp Phe Leu

                    20   25   30

Leu Thr Leu Ala Leu Pro Val Lys Ile Val Val Asp Leu Gly Val Ala
         35   40   45

Pro Trp Lys Leu Lys Ile Phe His Cys Gln Val Thr Ala Cys Leu Ile
         50   55   .   60

Tyr Ile Asn
 65

<210> 188
<211> 31
<212> PRT
<213> Homo sapiens

<400> 188
Lys Asn Thr Asn His Arg Cys Val Ser Ile Tyr Leu Ile Asn Leu Leu
 1   5   10   15

Thr Ala Asp Phe Leu Leu Thr Leu Ala Leu Pro Val Lys Ile Val
              20   25   30

<210> 189
<211> 17
<212> PRT
<213> Homo sapiens

<400> 189
Lys His Thr Val Glu Thr Arg Ser Val Ala Phe Arg Lys Gln Leu Asn
 1   5   10   15

Arg

<210> 190
<211> 30
<212> PRT
<213> Homo sapiens.

<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 190
Pro Gln Val Leu His Leu Arg Trp Leu Pro Lys Val Leu Gly Tyr Arg
 1   5   10   15

Ser Xaa Pro Leu Arg Leu Ala Asp Pro Ser Thr Phe Xaa Met

20   25   30

<210> 191
<211> 131
<212> PRT
<213> Homo sapiens

<400> 191
Gln Leu Leu Gly Phe Glu Gly Asn Asp Ser Ala Gly Glu Arg Arg Trp
 1   5   10   15

Arg Gly Ala Asn Met Gln Ile Pro Leu Leu Gln Val Ala Leu Pro Leu
             20   25   30

Ser Thr Glu Glu Gly Thr Gly Pro Ser Gly Pro Thr Gln Pro Ser Pro
         35   40   45

Gln Gly Glu Val Arg Phe Leu Arg Ser Pro Arg Met Gly Gly Gln Val
     50   55   60

Pro His Trp Glu Trp Arg Ser His Ser Leu Pro Trp Val Leu Thr Ser
 65   70   75   80

Thr Leu Ser Gly Cys Glu Gly Asp Leu Pro Gly Phe Pro His Gln Val
                 85   90   95

Gln Leu Pro Ala Ala Glu Ser His Thr Leu Asn Thr Gly Leu Leu Arg
             100   105   110

Ser Asp Thr Gly Gln Phe Thr Pro Cys Leu Lys Leu Ala Phe Glu Arg
         115   120   125

Pro Ser Gly
     130

<210> 192
<211> 24
<212> PRT
<213> Homo sapiens

<400> 192
Asn Asp Ser Ala Gly Glu Arg Arg Trp Arg Gly Ala Asn Met Gln Ile
 1   5   10   15

Pro Leu Leu Gln Val Ala Leu Pro
             20

<210> 193
<211> 29
<212> PRT
<213> Homo sapiens

<400> 193
Pro Ser Pro Gln Gly Glu Val Arg Phe Leu Arg Ser Pro Arg Met Gly
 1   5   10   15

Gly Gln Val Pro His Trp Glu Trp Arg Ser His Ser Leu
              20   25

<210> 194
<211> 27
<212> PRT
<213> Homo sapiens

<400> 194
His Gln Val Gln Leu Pro Ala Ala Glu Ser His Thr Leu Asn Thr Gly
 1   5   10   15

Leu Leu Arg Ser Asp Thr Gly Gln Phe Thr Pro
              20   25

<210> 195
<211> 60
<212> PRT
<213> Homo sapiens

<400> 195
Ala Pro Leu Glu Thr Met Gln Asn Lys Pro Arg Ala Pro Gln Lys Arg
 1   5   10   15

Ala Leu Pro Phe Pro Glu Leu Glu Leu Arg Asp Tyr Ala Ser Val Leu
              20   25   30

Thr Arg Tyr Ser Leu Gly Leu Arg Asn Lys Glu Pro Ser Leu Gly His
          35   40   45

Arg Trp Gly Thr Gln Lys Leu Gly Arg Ser Pro Cys
      50   55   60

<210> 196
<211> 217
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (97)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (157)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 196

```
Met Gln Asn Lys Pro Arg Ala Pro Gln Lys Arg Ala Leu Pro Phe Pro
1               5               10              15

Glu Leu Glu Leu Arg Asp Tyr Ala Ser Val Leu Thr Arg Tyr Ser Leu
            20              25              30

Gly Leu Arg Asn Lys Glu Pro Ser Leu Gly His Arg Trp Gly Thr Gln
        35              40              45

Lys Leu Gly Arg Ser Pro Cys Ser Glu Gly Ser Gln Gly His Thr Thr
    50              55              60

Asp Ala Ala Asp Val Gln Asn His Ser Lys Glu Glu Gln Arg Asp Ala
65              70              75              80

Gly Ala Gln Arg Xaa Cys Gly Gln Gly Arg His Thr Trp Ala Tyr Arg
                85              90              95

Xaa Gly Ala Gln Asp Thr Ser Arg Leu Thr Gly Asp Pro Arg Gly Gly
            100             105             110

Glu Arg Ser Pro Pro Lys Cys Gln Ser Met Lys Gln Gln Glu Gly Ala
        115             120             125

Pro Ser Gly His Cys Trp Asp Gln Trp Cys His Gly Ala Ser Glu Val
    130             135             140

Val Trp Pro Glu Ser Arg Lys Arg Ala Gln Ile Phe Xaa Ser Pro Cys
145             150             155             160

Arg Gln Ser Pro Arg Ser Ser Ala Leu Gly Ala Gly Gln Lys Leu Ala
            165             170             175

Val Cys Ser Pro Asp Ile Leu Cys Cys Pro Thr Asp Thr Leu Leu Ala
        180             185             190

Ser His Pro His Ser Leu Leu Thr Gly Thr Gln Phe Ser Gly Gln Thr
    195             200             205

Gln Ala Leu Ala Pro Ser Trp Cys Ala
    210             215
```

<210> 197
<211> 26
<212> PRT
<213> Homo sapiens

<400> 197
```
Ala Pro Gln Lys Arg Ala Leu Pro Phe Pro Glu Leu Glu Leu Arg Asp
1               5               10              15

Tyr Ala Ser Val Leu Thr Arg Tyr Ser Leu
            20              25
```

<210> 198
<211> 27

<210> 198 [continued]
<212> PRT
<213> Homo sapiens

<400> 198
Ala Pro Gln Lys Arg Ala Leu Pro Phe Pro Glu Leu Glu Leu Arg Asp
1   5   10   15

Tyr Ala Ser Val Leu Thr Arg Tyr Ser Leu Gly
            20   25

<210> 199
<211> 29
<212> PRT
<213> Homo sapiens

<400> 199
Leu Gly Arg Ser Pro Cys Ser Glu Gly Ser Gln Gly His Thr Thr Asp
1   5   10   15

Ala Ala Asp Val Gln Asn His Ser Lys Glu Glu Gln Arg
            20   25

<210> 200
<211> 25
<212> PRT
<213> Homo sapiens

<400> 200
Thr Asp Thr Leu Leu Ala Ser His Pro His Ser Leu Leu Thr Gly Thr
1   5   10   15

Gln Phe Ser Gly Gln Thr Gln Ala Leu
            20   25

<210> 201
<211> 77
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 201

```
Ile Ala Gln Val Leu Lys Ala Glu Met Cys Leu Val Xaa Arg Pro His
 1             5                 10                  15

Pro Xaa Leu Leu Asp Ser His Arg Gly Trp Ala Gly Glu Thr Leu Arg
        20              25                  30

Gly Gln Gly Arg Gln Glu Xaa Glu Ser Asp Thr Lys Ala Gly Thr Leu
        35              40                  45

Gln Leu Gln Arg Gln Ala Pro Leu Pro Leu Thr Gln His Ser Leu Val
    50              55                  60

Leu Pro Ile Ser Pro Gly Pro Ser Asn His Thr Gln Ser
65              70                  75
```

<210> 202
<211> 20
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 202
```
Arg Gly Trp Ala Gly Glu Thr Leu Arg Gly Gln Gly Arg Gln Glu Xaa
 1             5                 10                  15

Glu Ser Asp Thr
        20
```

<210> 203
<211> 20
<212> PRT
<213> Homo sapiens

<400> 203
```
Ala Pro Leu Pro Leu Thr Gln His Ser Leu Val Leu Pro Ile Ser Pro
 1             5                 10                  15

Gly Pro Ser Asn
        20
```

<210> 204
<211> 166
<212> PRT
<213> Homo sapiens

<400> 204
```
Asn Arg Glu Arg Gly Gly Ala Gly Ala Thr Phe Glu Cys Asn Ile Cys
 1             5                 10                  15

Leu Glu Thr Ala Arg Glu Ala Val Val Ser Val Cys Gly His Leu Tyr
        20              25                  30
```

```
Cys Trp Pro Cys Leu His Gln Trp Leu Glu Thr Arg Pro Glu Arg Gln
     35                  40                  45

Glu Cys Pro Val Cys Lys Ala Gly Ile Ser Arg Glu Lys Val Val Pro
     50                  55                  60

Leu Tyr Gly Arg Gly Ser Gln Lys Pro Gln Asp Pro Arg Leu Lys Thr
 65                  70                  75                  80

Pro Pro Arg Pro Gln Gly Gln Arg Pro Ala Pro Glu Ser Arg Gly Gly
                 85                  90                  95

Phe Gln Pro Phe Gly Asp Thr Gly Gly Phe His Phe Ser Phe Gly Val
             100                 105                 110

Gly Ala Phe Pro Phe Gly Phe Phe Thr Thr Val Phe Asn Ala His Glu
             115                 120                 125

Pro Phe Arg Arg Gly Thr Gly Val Asp Leu Gly Gln Gly His Pro Ala
     130                 135                 140

Ser Ser Trp Gln Asp Ser Leu Phe Leu Phe Leu Ala Ile Phe Phe Phe
145                 150                 155                 160

Phe Trp Leu Leu Ser Ile
                 165
```

<210> 205
<211> 149
<212> PRT
<213> Homo sapiens

<400> 205
```
Asn Arg Glu Arg Gly Gly Ala Gly Ala Thr Phe Glu Cys Asn Ile Cys
  1               5                  10                  15

Leu Glu Thr Ala Arg Glu Ala Val Val Ser Val Cys Gly His Leu Tyr
                 20                  25                  30

Cys Trp Pro Cys Leu His Gln Trp Leu Glu Thr Arg Pro Glu Arg Gln
     35                  40                  45

Glu Cys Pro Val Cys Lys Ala Gly Ile Ser Arg Glu Lys Val Val Pro
     50                  55                  60

Leu Tyr Gly Arg Gly Ser Gln Lys Pro Gln Asp Pro Arg Leu Lys Thr
 65                  70                  75                  80

Pro Pro Arg Pro Gln Gly Gln Arg Pro Ala Pro Glu Ser Arg Gly Gly
                 85                  90                  95

Phe Gln Pro Phe Gly Asp Thr Gly Gly Phe His Phe Ser Phe Gly Val
             100                 105                 110

Gly Ala Phe Pro Phe Gly Phe Phe Thr Thr Val Phe Asn Ala His Glu
             115                 120                 125
```

```
Pro Phe Arg Arg Gly Thr Gly Val Asp Leu Gly Gln Gly His Pro Ala
    130                     135                 140

Ser Ser Trp Gln Asp
145
```

<210> 206
<211> 41
<212> PRT
<213> Homo sapiens

<400> 206
```
Asn Arg Glu Arg Gly Gly Ala Gly Ala Thr Phe Glu Cys Asn Ile Cys
  1               5                  10                  15

Leu Glu Thr Ala Arg Glu Ala Val Val Ser Val Cys Gly His Leu Tyr
            20              25                  30

Cys Trp Pro Cys Leu His Gln Trp Leu
            35                  40
```

<210> 207
<211> 38
<212> PRT
<213> Homo sapiens

<400> 207
```
Glu Thr Arg Pro Glu Arg Gln Glu Cys Pro Val Cys Lys Ala Gly Ile
  1               5                  10                  15

Ser Arg Glu Lys Val Val Pro Leu Tyr Gly Arg Gly Ser Gln Lys Pro
            20                  25                  30

Gln Asp Pro Arg Leu Lys
            35
```

<210> 208
<211> 34
<212> PRT
<213> Homo sapiens

<400> 208
```
Thr Pro Pro Arg Pro Gln Gly Gln Arg Pro Ala Pro Glu Ser Arg Gly
  1               5                  10                  15

Gly Phe Gln Pro Phe Gly Asp Thr Gly Gly Phe His Phe Ser Phe Gly
            20                  25                  30

Val Gly
```

<210> 209
<211> 36

<212> PRT
<213> Homo sapiens

<400> 209
Ala Phe Pro Phe Gly Phe Phe Thr Thr Val Phe Asn Ala His Glu Pro
1   5   10   15

Phe Arg Arg Gly Thr Gly Val Asp Leu Gly Gln Gly His Pro Ala Ser
            20   25   30

Ser Trp Gln Asp
        35

<210> 210
<211> 15
<212> PRT
<213> Homo sapiens

<400> 210
Gly Leu Ser Thr Gly Pro Asp Met Ala Ser Leu Asp Leu Phe Val
1   5   10   15

<210> 211
<211> 97
<212> PRT
<213> Homo sapiens

<400> 211
Gly Arg Pro Thr Arg Pro Ser Gln Ala Thr Arg His Phe Leu Leu Gly
1   5   10   15

Thr Leu Phe Thr Asn Cys Leu Cys Gly Thr Phe Cys Phe Pro Cys Leu
            20   25   30

Gly Cys Gln Val Ala Ala Asp Met Asn Glu Cys Cys Leu Cys Gly Thr
        35   40   45

Ser Val Ala Met Arg Thr Leu Tyr Arg Thr Arg Tyr Gly Ile Pro Gly
    50   55   60

Ser Ile Cys Asp Asp Tyr Met Ala Thr Leu Cys Cys Pro His Cys Thr
65   70   75   80

Leu Cys Gln Ile Lys Arg Asp Ile Asn Arg Arg Arg Ala Met Arg Thr
            85   90   95

Phe

<210> 212
<211> 146
<212> PRT
<213> Homo sapiens

<400> 212

```
Ile Lys Asn Leu Ile Phe Phe Met Pro Ser Val Val Leu Lys His Ile
 1               5                  10                  15

His His Ile Ser Val Ala Lys Asp Gly Glu Glu Leu Lys Leu Lys Arg
             20                  25                  30

Cys Leu Leu Asn Phe Val Ala Ser Val Arg Ala Phe His His Gln Phe
         35                  40                  45

Leu Glu Ser Thr His Gly Ser Pro Ser Val Asp Ile Ser Leu Asp Leu
     50                  55                  60

Ala Lys Ser Thr Met Arg Thr Ala Lys Ser Cys His Ile Val Ile Thr
 65                  70                  75                  80

Asn Arg Ser Arg Asp Ala Ile Ser Gly Pro Val Glu Ser Pro His Cys
                 85                  90                  95

Asp Ala Cys Ser Thr Gln Thr Ala Phe Ile His Ile Ser Cys Asn Leu
             100                 105                 110

Thr Pro Lys Ala Arg Glu Thr Lys Cys Ala Thr Glu Thr Ile Ser Lys
         115                 120                 125

Gln Gly Ser Glu Gln Glu Met Ser Cys Gly Leu Gly Arg Thr Arg Gly
     130                 135                 140

Ser Thr
145


<210> 213
<211> 23
<212> PRT
<213> Homo sapiens

<400> 213
Phe Leu Leu Gly Thr Leu Phe Thr Asn Cys Leu Cys Gly Thr Phe Cys
 1               5                  10                  15

Phe Pro Cys Leu Gly Cys Gln
                 20


<210> 214
<211> 24
<212> PRT
<213> Homo sapiens

<400> 214
Ser Ile Cys Asp Asp Tyr Met Ala Thr Leu Cys Cys Pro His Cys Thr
 1               5                  10                  15

Leu Cys Gln Ile Lys Arg Asp Ile
                 20


<210> 215
```

<211> 30
<212> PRT
<213> Homo sapiens

<400> 215
Ser Val Val Leu Lys His Ile His His Ile Ser Val Ala Lys Asp Gly
1   5   10   15

Glu Glu Leu Lys Leu Lys Arg Cys Leu Leu Asn Phe Val Ala
            20   25   30

<210> 216
<211> 26
<212> PRT
<213> Homo sapiens

<400> 216
Asn Phe Val Ala Ser Val Arg Ala Phe His His Gln Phe Leu Glu Ser
1   5   10   15

Thr His Gly Ser Pro Ser Val Asp Ile Ser
            20   25

<210> 217
<211> 28
<212> PRT
<213> Homo sapiens

<400> 217
Thr Ala Phe Ile His Ile Ser Cys Asn Leu Thr Pro Lys Ala Arg Glu
1   5   10   15

Thr Lys Cys Ala Thr Glu Thr Ile Ser Lys Gln Gly
            20   25

<210> 218
<211> 6
<212> PRT
<213> Homo sapiens

<400> 218
Met Lys Gly Glu Ile Glu
1   5

<210> 219
<211> 14
<212> PRT
<213> Homo sapiens

<400> 219
Glu Phe Gly Thr Ser Arg Gly Arg Gln His Arg Ala Leu Glu
1   5   10

<210> 220
<211> 80
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 220
His Gln Thr Pro Gly Val Thr Gly Leu Ser Ala Val Glu Met Asp Gln
1   5   10   15

Ile Thr Pro Ala Leu Trp Glu Ala Leu Ala Ile Asp Thr Leu Arg Lys
            20   25   30

Leu Arg Ile Gly Thr Arg Arg Pro Arg Ile Arg Trp Gly Gln Glu Ala
            35   40   45

His Val Pro Ala Gly Ala Ala Gln Glu Gly Pro Leu His Leu Leu Leu
        50   55   60

Gln Arg Pro Ala Pro Trp Gly Xaa Ala Pro His Gly Lys Ala Cys Gly
65   70   75   80

<210> 221
<211> 87
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 221
Gly Leu Gly Gln Gly Gly Gln Gly Leu Asp Gly Gly Arg Lys Leu Met
1   5   10   15

Tyr Leu Gln Glu Leu Pro Arg Arg Asp His Tyr Ile Phe Tyr Cys Lys
            20   25   30

Asp Gln His His Gly Gly Xaa Leu His Met Gly Lys Leu Val Gly Arg
            35   40   45

Asn Ser Asp Thr Asn Arg Glu Ala Leu Glu Glu Phe Lys Lys Leu Val
        50   55   60

Gln Arg Lys Gly Leu Ser Glu Glu Asp Ile Phe Thr Pro Leu Gln Thr
65   70   75   80

Gly Ser Cys Val Pro Glu His
        85

<210> 222
<211> 176
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (84)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (143)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (152)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 222
Ser Gly Pro Ser Arg Leu Arg Thr Ser Leu Ser His Pro Val Ser Asp
1   5   10   15

Val Arg Ala Thr Ser Pro Pro Gly Arg Arg Gly Gln Pro Leu Leu Gly
            20   25   30

Gly Gly Gln Ser Trp Gly Pro Gly Lys Arg Ala Ala Trp Ala Leu Ser
        35   40   45

Thr Cys Gly Gly Trp Cys Thr Gly Val Gly Gly Gly Gly Xaa Trp Gly
    50   55   60

Trp Glu Trp Gly Arg Gly Ser Gln Ala Leu Tyr Leu Pro Gly Ser Ser
65   70   75   80

Val Phe Arg Xaa Arg Ile Phe Phe Trp Met His Arg Ser Ser Leu Met
            85   90   95

Lys Val Asn Val Ala Ser Asn Phe Pro Pro Pro Arg Ala Val Thr Phe
            100   105   110

Thr Gly Asp Thr Phe Trp Ala Ser Cys Leu Arg Lys Val Leu Ser Thr
        115   120   125

Thr Met Ala Phe Thr Tyr Gln Val Pro Val Ile Ser Ser Ser Xaa Arg
    130   135   140

Val Lys Asp Arg Ala Ala Ala Xaa Pro Ser Val Thr Pro Arg Asn Arg
145   150   155   160

Val Phe Ile Ser Arg Ala Leu Cys Cys Arg Pro Arg Leu Val Pro Asn
                165   170   175

<210> 223
<211> 103
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (74)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (92)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 223
Gly Leu Pro Glu Gly Arg Arg Asp Leu Val His Leu Asp Cys Gly Gln
 1   5   10   15

Ala Cys His Thr Arg Cys Leu Met Ser Gly Pro Pro Ala Pro Gln Glu
                20   25   30

Gly Glu Ala Ser Pro Ser Leu Glu Val Gly Arg Ala Gly Ala Leu Ala
            35   40   45

Lys Gly Gln Pro Gly His Ser Leu Pro Val Glu Ala Gly Ala Leu Gly
        50   55   60

Leu Ala Val Gly Glu Gly Gly Gly Gly Xaa Gly Gly Gly Ala His Arg
65   70   75   80

Arg Cys Ile Cys Gln Ala Pro Pro Ser Ser Ala Xaa Gly Phe Ser Ser
                85   90   95

Gly Cys Thr Asp Pro Pro Ser
                100

<210> 224
<211> 30
<212> PRT
<213> Homo sapiens

<400> 224
Val Glu Met Asp Gln Ile Thr Pro Ala Leu Trp Glu Ala Leu Ala Ile
 1   5   10   15

Asp Thr Leu Arg Lys Leu Arg Ile Gly Thr Arg Arg Pro Arg
                20   25   30

<210> 225
<211> 23
<212> PRT
<213> Homo sapiens

<400> 225
Arg Lys Leu Met Tyr Leu Gln Glu Leu Pro Arg Arg Asp His Tyr Ile
1   5   10   15

Phe Tyr Cys Lys Asp Gln His
            20

<210> 226
<211> 23
<212> PRT
<213> Homo sapiens

<400> 226
Glu Ala Leu Glu Glu Phe Lys Lys Leu Val Gln Arg Lys Gly Leu Ser
1   5   10   15

Glu Glu Asp Ile Phe Thr Pro
            20

<210> 227
<211> 27
<212> PRT
<213> Homo sapiens

<400> 227
Arg Ala Thr Ser Pro Pro Gly Arg Arg Gly Gln Pro Leu Leu Gly Gly
1   5   10   15

Gly Gln Ser Trp Gly Pro Gly Lys Arg Ala Ala
            20   25

<210> 228
<211> 29
<212> PRT
<213> Homo sapiens

<400> 228
Phe Phe Trp Met His Arg Ser Ser Leu Met Lys Val Asn Val Ala Ser
1   5   10   15

Asn Phe Pro Pro Pro Arg Ala Val Thr Phe Thr Gly Asp
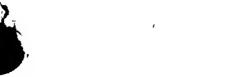   20   25

<210> 229
<211> 28
<212> PRT
<213> Homo sapiens

<400> 229

Cys Leu Met Ser Gly Pro Pro Ala Pro Gln Glu Gly Glu Ala Ser Pro
 1   5   10   15

Ser Leu Glu Val Gly Arg Ala Gly Ala Leu Ala Lys
        20   25